

Engineering and Physical Sciences Research Council (EPSRC): Place Based Impact Acceleration Accounts: Early-Stage Review

Evaluation Report

September 2025





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Glossary

Acronym	Meaning
AgTech	Agricultural Technologies
Al	Artificial Intelligence
DHTA	Digital Healthcare Technology Impact Accelerator
EMERGE	East Midlands Emerging Rehabilitation Technology Growth Enterprise
EPS	Engineering and Physical Sciences
EPSRC	Engineering and Physical Sciences Research Council
FDI	Foreign Direct Investment
FTE	Full-Time Equivalent
HEI	Higher Education Institution
IAA	Impact Acceleration Account
IBIC	Industrial Biotechnology Innovation Catalyst
IP	Intellectual Property
KPI	Key Performance Indicator
LinCam	Lincolnshire-Cambridge
MedTech	Medical Technologies
NESCA	North East Space Communications Accelerator
NHS	National Health Service
PBIAA	Place-Based Impact Acceleration Account
PPIE	Patient and Public Involvement and Engagement
PQA	Photonics and Quantum Accelerator
R&D	Research and Development
R&I	Research and Innovation
SME	Small and Medium-sized Enterprise
SWCS	South Wales Compound Semiconductor
ToC	Theory of Change
UKRI	UK Research and Innovation



1. Executive summary

1.1. Background and aims of the PBIAAs early-stage review

Place Based Impact Acceleration Account (PBIAA) Scheme

The PBIAA scheme was launched by the Engineering and Physical Sciences Research Council (EPSRC) in October 2022, with the pilot rounds concluding in 2029. The PBIAA scheme aims to align engineering and physical sciences research with place-based thematic clusters to drive local economic growth and innovation. This place-based approach is a departure from traditional EPSRC funding models and is designed to foster collaboration between universities, civic organisations, and businesses, enhancing the relevance and impact of research in defined places.

Through the PBIAA scheme pilot, EPSRC has invested over £63 million across 17 consortia, distributed via two funding rounds. Prospective PBIAAs could apply for one of two funding streams. The first was for 'emerging' clusters, with up to £2.5 million available. The second was for 'established' clusters, with up to £5 million available. Applicants self-selected the stream most applicable based on their own assessment of the maturity of the pre-existing network of industry, academic and civic partners in the area.

Funded PBIAAs span a wide range of industry sectors, including net zero energy, biotechnology, digital healthcare, and cybersecurity, and are distributed across the UK, including Northern Ireland, Scotland, Wales, and various regions of England.

Early-stage review

Objectives: RSM UK Consulting LLP (RSM) were commissioned by EPSRC to undertake an early-stage review of the PBIAA scheme. The overarching objectives of the review were to:

- 1. Provide a framework for EPSRC to conduct ongoing monitoring and evaluation through the lifetime of the PBIAA scheme (due to conclude in 2029).
- 2. Capture information and examples about early outcomes and success indicators from the funded PBIAAs.
- 3. Examine information about how the PBIAAs came together, how they deliver on their stated objectives, and EPSRC's role in facilitating them.
- 4. Understand the benefits (and potential risks) of a place-based approach to research and innovation.
- 5. Generate case studies that capture emerging success stories of the PBIAAs.

To address these overarching objectives, the early-stage review sought to understand the PBIAA scheme's **Reach**, **Effectiveness**, **Adoption**, **Implementation** and **Maintenance** ("RE-AIM" framework).

Evidence: This report examines findings from 35 qualitative depth interviews with funded PBIAA consortia members, two interviews with EPSRC, 93 responses to the baseline survey and ten case studies. Interviews were conducted with representatives from most PBIAAs.

Limitations: This review has the following limitations:

- Respondent profile: Round 1 PBIAAs were overrepresented within the PBIAAs interviewed and the
 survey responses received. More consortia were funded in Round 1 compared with Round 2, which
 likely contributed to this. As data collection started before the launch of Round 2 PBIAAs, there was
 some hesitation from Round 2 PBIAAs to participate in data collection, as some felt less able to
 meaningfully participate. Consequently, the findings from Round 1 PBIAAs are slightly
 overrepresented.
- **Early-stage review timing:** Round 1 PBIAAs started delivery 12-months prior to the data collection conducted in this review. As a result, they were only able to evidence short-term outcomes. Data collection with Round 2 PBIAAs started before their PBIAAs launched, therefore it is too early to



evidence or report on any outcomes. Nevertheless, Round 2 PBIAA interviews still contributed learnings to various research questions.

1.2. Key findings

Our evidence gathering and analysis has highlighted **process** findings around the place-based approach and formation and delivery of PBIAAs (objectives 3 and 4) and **impact** findings showcasing early outcomes from funded PBIAAs (objective 2):



Designing PBIAAs with a place-based approach:

- The design of PBIAAs was deeply influenced by their local context. EPSRC's engagement with civic and academic stakeholders resulted in the PBIAA scheme being well-received by participants.
- In regions with established industrial clusters, consortia found it easier to define their scope and align with regional strengths, building on existing networks and infrastructure.
- Some consortia initially struggled to define their geographic and thematic focus, especially when their research had broader relevance beyond their desired region or where there were overlapping socioeconomic contexts. PBIAAs noted EPSRC's support in helping refine their scope of work.
- The place-based model was seen as more collaborative and less siloed than other funding approaches, offering greater flexibility and responsiveness to local needs. Many PBIAAs appreciated the proximity to partners and the ability to leverage local facilities and networks as key benefits.



Building partnerships across sectors:

- Civic partners played a crucial role in bringing in industry and other partners, especially in regions where their economic priorities aligned with PBIAA goals. Civic partners with individuals from relevant Engineering and Physical Science (EPS) backgrounds were particularly effective.
- The phasing out of Local Enterprise Partnerships (LEPs) and ongoing English devolution created uncertainty, requiring consortia to adapt their strategies.
- In some cases, the expanded definition of civic partners—such as local business groups—proved helpful, particularly in areas with limited local government capacity.
- Consortia's experience of engaging industry was mixed. While small and medium-sized enterprises (SMEs) were often enthusiastic and agile, larger corporations posed challenges due to complex governance and slower decision-making, particularly around signing memoranda of understanding, IP and collaboration agreements.
- PBIAAs led by academics with prior industry experience found it easier to navigate these dynamics.



Experience of the application process:

- Most PBIAAs were satisfied with the application process. While some felt the level of effort was high compared to other grant applications, it was justified by the scale of funding available.
- Emerging clusters faced challenges such as limited staff capacity, tight travel budgets, and the need to build new networks, making the process more demanding.
- Support from universities and clear guidance from EPSRC were critical enablers, helping applicants manage legal and logistical complexities and focus their scope of work.



Working as a consortium:

 Once funded, consortia adopted a variety of governance models. Most meet regularly—monthly or bimonthly—and many established advisory boards with representatives from academia, industry, and civic sectors. These boards helped ensure that PBIAAs remained grounded in real-world needs and avoided overly abstract research.



- Collaboration among academics was generally strong, especially where pre-existing relationships
 existed. Civic partners added value by anchoring PBIAA approaches in local policy and helping attract
 investment, though their capacity to engage varied.
- In emerging clusters, new connections were forged, though limited funding per academic sometimes constrained deeper engagement.

Delivering in a place-based context:

- The place-based nature of PBIAAs brought both benefits and challenges. In smaller geographic areas, consortia benefited from easier in-person collaboration and faster decision-making. However, they also faced the challenge of a smaller number of potential collaborators within their geographic remit.
- Regions covering a wider geographical area faced logistical hurdles, such as not being able to meet in person as regularly, and greater diversity in local needs.
- Irrespective of size, having a strong support team including dedicated project managers and business
 development managers was seen as essential to effective delivery. It is important to allow for an
 appropriate project management/support budget to encourage this.
- Emerging PBIAAs require comparable levels of project support time to established clusters.



Fostering new partnerships and innovation:

- PBIAAs were proactive in launching events, workshops, and webinars to spark new collaborations.
 These efforts were particularly valuable for early-career researchers, offering them rare opportunities to connect with industry and civic stakeholders.
- Many consortia allocated funding to support smaller, early-stage projects, with the aim of nurturing them into larger initiatives or seed spin out activity.
- Training in commercialisation and place-based impact was provided to applicants to improve the
 quality of applications and to build long-term capacity. Training included mentoring and workshops
 around commercialisation and how to write proposals that demonstrate that there will be economic or
 social benefit to the geographic area.



Capacity building and PBIAA activities:

- PBIAAs have conducted a wide range of capacity-building activities, including mentoring, workshops, and training. These efforts are helping academics, particularly early-career researchers, develop skills in commercialisation and industry engagement.
- PBIAAs have held consultations with industry stakeholders to highlight skill gaps within the cluster
 workforce, which PBIAAs can develop training to help address. Industry skill gaps identified so far by
 PBIAAs have included technician level skills, and skills relating to net zero practice. Some PBIAAs
 have started delivering this training to industry, which has been positively received.
- PBIAAs have developed secondment schemes between academia and industry. Some suggested this
 required a longer lead time than expected due to the need for relationship building and planning with
 industry stakeholders.
- PBIAAs also conducted training for industry staff to increase their awareness of key innovations and new research from academia. This also required a longer-than-expected lead time due to bureaucracy and time taken to gain the relevant approvals from companies.



Awareness and networking:

- Workshops have proven effective in raising awareness and fostering new partnerships, especially
 when targeted at specific segments of the value chain. Civic partners have played a vital role in
 promoting PBIAAs through their existing networks and events.
- PBIAAs used a targeted marketing approach and business support networks to successfully engage industry and develop new partnerships.





Policy and public engagement:

- Some PBIAAs have begun engaging with policymakers and drafting policy papers, aided by strong
 civic and academic networks. While it is too early to observe policy impact, early engagement is laying
 the groundwork for future influence.
- Some PBIAAs are also engaging the public and have key performance indicators (KPIs) around increasing the diversity of stakeholders engaged in science and technology.



Collaboration Fund:

- Progress on the Collaboration Fund has been mixed. Some consortia have integrated it into their internal calls, while others faced challenges with proposal quality from non-consortia universities.
- Non-consortia applicants need targeted support to align proposals with place-based goals and commercial relevance.



Knowledge and understanding of consortium and R&D:

- Survey data and interviews show that while individual technical confidence varies, most respondents feel they can access the expertise they need within their consortium.
- Training has improved understanding of commercialisation and place-based challenges for consortium members, and regular events have enhanced awareness of consortium activities.
- Ongoing training and structured engagement are key to building both technical and contextual understanding within consortia.



Understanding of place:

- Workshops and scoping exercises have deepened consortia's understanding of local challenges, leading to tailored responses such as technician training programmes. This place-sensitive approach is beginning to shape more relevant and impactful activities.
- It is evident that co-designed training and scoping activities are effective tools for embedding placebased thinking into PBIAA design and delivery.



Wider R&I landscape & non-consortia outcomes:

- While broader integration into the R&D landscape outcomes are still emerging, early indicators include:
 - o Upskilling of local industry staff; and,
 - Helping to facilitate businesses to pivot into the consortium's EPS space
- PBIAAs are working to align their activities with the wider R&I landscape, including with regional growth plans and influencing local authorities to prioritise their EPS area in new plans.
- PBIAAs reported that building cluster identity and visibility is a foundational step toward long-term integration and attracting investment.



Sustainability:

- PBIAAs are starting to deliver capability and relationship-building activities to ensure sustainability of their clusters. For emerging clusters, this means developing their cluster into an established one. For established clusters, this means becoming internationally recognised.
- Building cluster identity and visibility is a foundational step toward long-term integration and attracting investment.



1.3. Recommendations

The following recommendations are split between those supporting the delivery of existing PBIAAs and for future rounds of PBIAA (if applicable) or wider investments by EPSRC. The main report also includes additional research questions for consideration as part of the final impact evaluation of this scheme.

For PBIAAs

- 1. Enhance academic understanding of place-based context in calls for proposals. Academics especially those that are not used to bringing local context into their research can find it challenging to embed place within their proposals. PBIAAs should accompany calls for proposals with targeted support such as training, mentoring, and tailored guidance to help researchers strengthen their understanding of local priorities and shape more impactful submissions.
- 2. Establish dedicated project management capacity. Due to the scale and complexity of PBIAAs, consortia should allocate resources to secure at least one full-time equivalent (FTE) project manager, ideally supported by a broader team. Separating core coordination and administration functions from business development responsibilities will enable PBIAAs to effectively manage internal operations while actively cultivating new partnerships and outreach opportunities.

For EPSRC

- 3. Provide additional support for emerging clusters. Emerging consortia often face greater time and resource burdens in building networks and launching activities especially across wide geographic areas. EPSRC should consider equalising project management budgets between emerging and established clusters. It should also consider allowing for greater flexibility around project start timelines and incorporate this into KPI measures and guidance.
- 4. Advise applicants on the benefits of having strong industry links within their consortia leadership. Prior experience of industry engagement accelerates cluster mobilisation and enhances potential for spinouts and commercialisation. For future rounds of PBIAA (if applicable), EPSRC should advise applicants on the benefit of having consortia leadership with demonstrable track record of collaborative work.
- 5. Ensure that high levels of civic engagement are maintained across the PBIAA portfolio and for the full duration of awards. Civic actors play a critical role in cluster success by facilitating access to local business networks, supporting inward investment, and unlocking operational barriers, such as planning permission and strategic priorities. Continued alignment with regional R&I strategies and active civic involvement will be essential for the long-term sustainability of PBIAAs or recipients of future EPSRC / UKRI funding awards.
- 6. Strengthen knowledge exchange between PBIAAs. Peer learning has proven highly valuable, as demonstrated by the success of the Edinburgh workshop (see section 4.3.2.3 for further details on the workshop). EPSRC should facilitate regular (once per year as a minimum) knowledge-sharing sessions across PBIAAs and the wider EPS sector and other industry and civic stakeholders ensuring that both early and more advanced consortia are represented. These forums will foster thematic collaboration and promote good practice in governance and delivery.
- 7. Offer clearer guidance on administration, subsidy control, and IP management. While initial industry engagement has been promising, PBIAAs continue to encounter common challenges in establishing new partnerships especially in emerging clusters. EPSRC should develop practical guidance on strategies project leads or any academic seeking to engage industry could use based on its experience with IAAs and other initiatives to address common barriers and enable smoother collaboration.



2. Introduction and background

2.1. Introduction

The Engineering and Physical Sciences Research Council (EPSRC) is investing over £63 million through the Place Based Impact Acceleration Accounts (PBIAA) scheme. This funding supports 17 consortia to connect engineering and physical sciences research with specific regional themes to increase impact. EPSRC commissioned RSM UK Consulting LLP (RSM) to carry out an early-stage review of the PBIAA scheme.

This report explores emerging findings relating to PBIAA scheme processes, as well as findings around activities conducted by PBIAAs and early outcomes achieved.

2.2. Background to the PBIAA

PBIAAs are a new mechanism of EPSRC funding. EPSRC funded awards are predominantly based on scientific quality. This approach has yielded many economic and social benefits, some of which related to place. The PBIAA scheme is EPSRC's first funding mechanism with a specific primary place assessment criteria and intentioned geographic balancing of awards. The PBIAA scheme design was informed by discussion and analysis of the role of place as part of the activities of EPSRC.

EPSRC launched the PBIAA scheme in October 2022, with the pilot rounds concluding in 2029. The PBIAA scheme focuses on developing place-based impact within research and innovation clusters, promoting collaboration and knowledge exchange through a consortium-led approach. The PBIAA scheme aligns with established and emerging geographic thematic clusters that have potential to drive regional growth and capabilities. The design was informed by "Evidence of what works: Research and Innovation (R&I) and Place" report. This highlighted the potential to enhance place-based outcomes by making marginal, place-aware adjustments to UK Research and Innovation's (UKRI) operations. This would help align research and innovation (R&I) investments with local needs and contexts. It builds on Philip McCann's 2019 work², which explored the potential for a place-based shift in R&I policy.

EPSRC's place strategy is a key component of their 2022-2025 strategic delivery plan, aligned with the broader UKRI strategy (2022-2027). It aims to build on the success of Institutional Impact Acceleration Accounts (IAAs) to develop complementary place-based IAAs. It also seeks to enhance engagement at regional levels and establish place-based investments to foster academic-business partnerships.

2.2.1 Role of PBIAAs

Over £63 million was awarded to 17 consortia through the PBIAA scheme to drive regional economic growth, tackle local challenges, and enhance collaboration among universities, civic bodies, and businesses across the UK. In Funding Round 1, £41 million was allocated to 10 consortia, focusing on sectors such as net zero energy, agri-tech, biotechnology, and advanced manufacturing. Funding Round 2 followed with £22 million awarded to 7 consortia addressing digital healthcare, offshore wind, cybersecurity, and more. Two streams of funding were open for applications. Stream 1 was for emerging/nascent clusters and had up to £2.5 million available per award. Stream 2 was for established/mature clusters and had up to £5 million available per award. How emerging and established clusters were defined is explored in section 4.3.1.3.

The funded consortia span regions across the UK, including Northern Ireland, Scotland's Central Belt, Wales, and England (with activities in areas like the North West, North East, East Midlands, Yorkshire, South West, and London). Consortia include 42 academic institutions and 226 partners from industry and civic backgrounds. PBIAA funding is reaching 17 universities who have not previously had access to EPSRC IAA funding.

¹ See, Evidence of what works: research and innovation (R&I) and place (UKRI, 2022)

² See, UK Research and Innovation: A Place Based Shift (McCann, Philip, 2019)



2.3. Review objectives

Understanding the impact of this funding and the funding mechanism is critical to helping EPSRC make decisions on the potential for continuation through future rounds and/or incorporation in other EPSRC or UKRI funding mechanisms. This early-stage review will also form a component of future discussions on how R&D funding policy can best meet the needs and potential of communities across the UK, as well as enabling targeted support to areas of international competitiveness with respect to R&D and/or productivity of industrial clusters. Aligned with this, this early-stage review aims to answer the following research questions:

Reach	
Research question	See section
What types of organisations did the selected (and non-selected) PBIAA partnerships consist of and how many were proximate to the target place?	4.2
Did the individually funded PBIAA reach the type of partnerships it set out to?	4.3.1.2
To what extent did individually funded PBIAAs develop existing or new partnerships (including funding made available to non-consortium members)?	4.3.2.2, 5.2.1
Effectiveness	
Research question	See section
What were the enhanced benefits, as compared to non-place-based approaches and were these generated?	4.3.2.3. 5.2.3
How did PBIAAs self-select their status as an emerging or established cluster? How effective was this?	4.3.1.3
What are the observed changes/outcomes and for whom, including proximal short-term effects e.g. capacity?	5.2
To what extent is the PBIAA scheme addressing place-based needs, challenges and context to deliver?	5.2.3
How and to what extent did outcomes vary across individually funded PBIAAs. To what extent can variation be explained by place-based factors?	4.3.2.3
Is there an increased recognition of the cluster/place specialism, leading to increased capability and capacity?	5.3
Adoption	
Research question	See section
What types of consortia were supported, including settings (place, organisations) and individuals involved in delivery?	4.2, 4.3.1
Implementation	



Research question	See section
How do features of the PBIAA scheme compare to other models and how does this relate to observed outcomes and effects?	4.3.2
How have individually funded PBIAAs differentiated from previous ways of working locally and what was already there in the areas?	4.3.2.3
How have individually funded PBIAAs developed or strengthened collaboration with different stakeholders and what benefits has this provided for future research activity?	5.2.2
What range of implementation strategies were used by individually funded PBIAAs, and which were most successful and why?	4.3.2, 5.2.1
Maintenance	
Research question	See section
To what extent have partnerships developed and look to continue?	5.4
To what extent has the PBIAA scheme strengthened the sustainability of sectoral clusters and how?	5.4

This report presents findings from the early-stage review split by process and impact evaluation findings. The conclusions section brings together evidence under each of the research question themes above. The limitations of this early-stage review in answering these research questions are presented in section 3.8.



3. Review methodology

3.1. Overview

This report draws on evidence from interviews and baseline surveys with PBIAA consortia members, collected up to 22 July 2025. Appendix 7.1 gives further details used in this early-stage review, and the rationale for this methodology.

3.2. Theory of Change

The Theory of Change (ToC) development for this early stage PBIAA review comprised of 6 steps, detailed below:

- Step 1: Desk review A comprehensive desk review was performed, which included a review of:
 - a) The base ToC produced by EPSRC to use as the basis of this expanded ToC
 - o b) The successful Round 1 and Round 2 applications, mapping them against ToC elements
 - c) 35 pieces of background documentation and literature, including research reports, evaluation reports and policy papers
 - d) An extensive list of secondary data available to inform the development of the outcomes/impacts section of the ToC
- **Step 2**: Initial ToC draft Following the desk review, the preliminary ToC was developed for refinement in a series of workshops/consultations.
- **Step 3**: EPSRC workshop The evaluation team presented the initial ToC draft in a workshop with EPSRC staff, providing an opportunity to offer insights on the appropriateness, relevance, and coherence of the ToC and identify any missing elements.
- **Step 3**: Advisor feedback Following the first stage of ToC refinement the evaluation team's academic advisors gave feedback on the ToC.
- **Step 5**: PBIAA reference group workshop As part of this early-stage review of the PBIAA scheme, a PBIAA reference group was set up, which consists of representatives from four PBIAA consortia to feedback on the ToC, research tools and reports. The ToC was presented for feedback to the PBIAA reference group in a workshop.
- Step 6: First draft ToC finalisation The finalised ToCs were shared with EPSRC w/c 10th February.

The ToC provides the theoretical basis of this early-stage review. It informed the Monitoring and Evaluation Framework (Annex 7.5), and the subsequent research tools used to capture evidence for this review. The final, agreed ToC is presented overleaf (Figure 1)

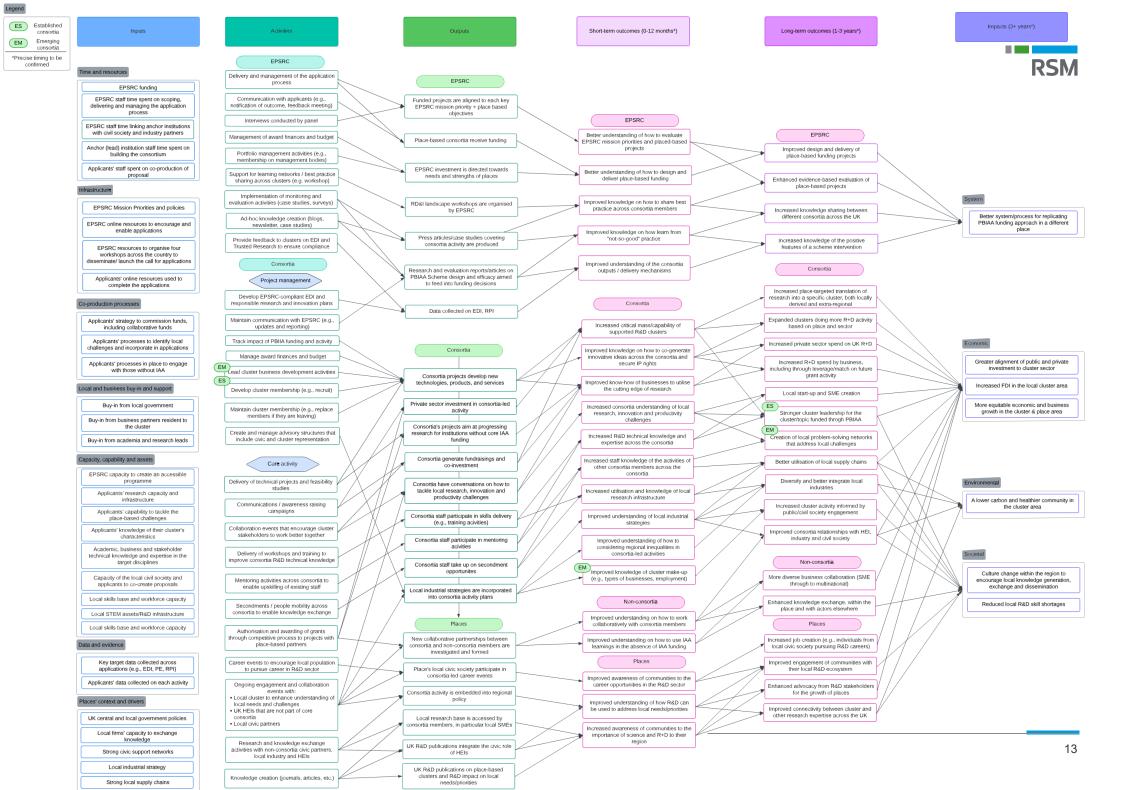




Table 1 shows the different components of the ToC. Each section flows into the next, in chronological order, where inputs occur first in the intervention and impacts occur last.

Table 1 – ToC sections

ToC section	Description
Inputs	Inputs are the resources that go into a policy, intervention or project.
Activities	Activities are the specific services delivered through the intervention. The ToC categorises the activities by those conducted by EPSRC and those conducted by consortia.
Outputs	Outputs are the quantifiable products, events, services etc., delivered through the services provided. The ToC categorises EPSRC outputs, consortia outputs and place outputs.
Short-term outcomes	Short-term outcomes are the changes/benefits that occur as a direct consequence of the Fund's activities. Short-term outcomes are expected to be realised within 12 months of the intervention. The ToC categorises short-term outcomes that affect EPSRC, consortia, non-consortia and place.
Long-term outcomes	Long-term outcomes are changes/benefits that occur over a more extended period of time, but still within the PBIAA scheme's timeframes. These outcomes are broader in scope and also influenced by wider interventions beyond those from PBIAA. Long-term outcomes are expected to be realised within one-three years of the intervention. The ToC categorises long-term outcomes that affect EPSRC, consortia, non-consortia and place.
Impacts	Impacts are the desired overarching aim / goal, usually in the longer-term. The impacts are expected to be realised after three years of the intervention. The ToC categorises impacts that affect the system, the economy, society and the environment.

Data collection for this early-stage review was conducted when Round 1 PBIAAs were roughly 12-months into the delivery of their PBIAA. Round 2 PBIAAs were interviewed within the first 3-months of their delivery. Therefore, most of the outcomes observed through this early-stage review are short-term outcomes.

3.3. Monitoring and evaluation framework development

This early-stage review is accompanied by a recommended monitoring and evaluation (M&E) framework. The recommended M&E framework details the short-term outcomes, long-term outcomes and impacts from the ToC along with possible indicators/metrics that could be used to evaluate the impact of the PBIAA scheme. The framework was used to inform the design of the research tools used in this early-stage review. Using the findings from this report, the M&E framework was updated to provide EPSRC with recommendations to continue monitoring and evaluating the PBIAA scheme. This guide will be used by EPSRC to inform their monitoring and evaluation up to the conclusion of the PBIAA scheme in 2029.

3.4. Secondary data analysis

The monitoring and evaluation framework sets out a variety of outcome areas that could be evidenced through secondary sources. However, these tended to be longer-term outcomes, that were not expected to be realised within the period of this early-stage review. Findings from initial interviews have validated that these outcomes have not been realised in the short-term. Therefore, this report draws on limited evidence from secondary sources to contribute to case studies on an ad hoc basis.



3.5. Survey

For this early-stage review, a baseline survey was administered to all Project Leads, Co-investigators and project partners named in the PBIAA applications via email. Additionally, Project Leads were asked to forward the survey link to anyone involved in their consortium that were not named in the application.

The primary purpose of the baseline survey was to provide EPSRC a baseline understanding of the capabilities and levels of collaboration within consortia, so that distance travelled can be assessed if/when follow-up surveys are administered in the future. Within this early-stage review, the baseline findings were used to corroborate qualitative interview findings.

93 baseline survey responses were received, with 57% from Round 1 PBIAAs, and 38% from Round 2 PBIAAs³. It is not possible to calculate an exact response rate for this survey as Project Leads were asked to forward the survey link to other consortia members who were not named in the application. Therefore, the total population is unknown. However, using the number of contacts on the survey distribution list as the population gives an approximate response rate of 33%.

3.6. Interviews

This report draws on findings from 35 qualitative in-depth interviews with Project Leads, Co-investigators and project partners from PBIAAs, with 25 interviews with Round 1 PBIAAs, and 10 interviews with Round 2 PBIAAs. These were a mix of 1:1 and group interviews. Interviews were conducted using MS Teams and lasted up to 60 minutes. These interviews were fully transcribed and coded deductively into an analytical framework. The qualitative framework was iteratively updated to ensure that emerging themes were captured. Two group interviews were also conducted with EPSRC staff to gather process related findings.

3.7. Case studies

Findings from interviews with PBIAA consortia members were also used to produce a set of 10 case studies (see <u>case studies</u>). Each case study has a different thematic focus, to demonstrate the breadth of activities carried out by the PBIAAs. Nine case studies were produced with Round 1 PBIAAs, and one case study was produced with a Round 2 PBIAA. Round 1 PBIAAs were favoured for this set of case studies as they were further into their delivery, compared with Round 2 PBIAAs. Prior to publishing, draft case studies were shared with the relevant Project Leads to confirm the content of the case studies. This report draws on examples from these case studies to give examples to key findings.

3.8. Limitations

- Respondent profile: Round 1 PBIAAs were overrepresented within the PBIAAs interviewed and the
 survey responses received. More consortia were funded in Round 1 compared with Round 2, which
 likely contributed to this. Additionally, some consortia members from Round 2 PBIAAs were cautious
 about contributing to the review as they were in the very early stages of setting up their PBIAAs.
 Therefore, findings from Round 1 PBIAAs are slightly overrepresented in this early-stage review.
- **Timeframe:** Round 1 PBIAAs started delivery roughly 12-months prior to the data collection conducted in this review, so were only able to evidence short-term outcomes. Data collection with Round 2 PBIAAs started before their PBIAAs launched and ran up to 3-months into delivery. Therefore, for Round 2 PBIAAs, it was too early to evidence any outcomes.

³ 5% of respondents did not know the title of their PBIAA, so it was not possible to determine which funding round they were from.



4. Early-stage process review findings

4.1. Overview of data used in this section

This section draws on findings and insights from 35 interviews with consortia members from PBIAAs, 93 responses to the baseline survey and PBIAA application forms.

4.2. Profile of PBIAAs

Consortia funded through the PBIAA scheme are from a range of backgrounds, both geographically and by field of study. A brief summary of the funded PBIAAs is included in the table below.

Table 2 – PBIAA consortia

Title	Geography	Cluster maturity	Lead	Partners	Funding round
A placed-based IAA in Photonic Technologies in Scotland's Central Belt	Scotland's Central Belt	Established	University of Glasgow	Heriot Watt University, University of St Andrews, University of Strathclyde	Round 1
Accelerating Innovation in the Forth and Tay Offshore Wind Cluster	Forth and Tay region	Emerging	University of Edinburgh	University of Dundee	Round 2
CyberFocus - Cyber Impact for the North West	North West of England	Established	Lancaster University	Manchester Metropolitan University, University of Central Lancashire, University Cumbria, University of Liverpool, University of Manchester, University of Salford	Round 2
Digital Healthcare Technology Impact Accelerator (DHTA)	Northern Ireland	Emerging	University of Ulster	Queen's University Belfast	Round 2
East Midlands Emerging Rehabilitation Technology Growth Enterprise (EMERGE)	East Midlands	Emerging	Nottingham Trent University	Loughborough University, University of Derby, University of Nottingham	Round 2
GW-SHIFT: Great Western Supercluster of Hydrogen Impact for Future Technologies	South West of England and South Wales	Emerging	University of Bath	Cardiff University, University of Birmingham, University of Bristol, University of Exeter, University of Plymouth, University of South Wales	Round 1



Industrial Biotechnology Innovation Cluster	North West of England	Established	University of Manchester	Manchester Metropolitan University, University of Liverpool, University of Salford	Round 1
Innovating Medical Technologies across the Yorkshire Region	Yorkshire	Established	University of Leeds	University of Sheffield	Round 1
Maritime and Last Mile Net Zero (MaLaMi)	Merseyside and Belfast	Emerging	Liverpool John Moores University	Queen's University Belfast, University of Liverpool	Round 2
North East Space Communications Accelerator (NESCA)	North East of England	Emerging	Northumbri a University	Durham University, Newcastle University	Round 2
Northern Net Zero Accelerator - Energy Systems Integration for a Decarbonised Economy	North East of England, Teeside and the Humber	Established	Newcastle University	Durham University, Northumbria University, Teeside University, University of Hull, University of Sunderland	Round 1
Nuclear robotics and artificial intelligence cluster across Cumbria and Oxfordshire	Cumbria and Oxfordshire	Established	UK Atomic Energy Authority	University of Cumbria, University of Manchester, University of Oxford	Round 2
Park Royal PBIAA Net-Zero Food Supply Chains	West London	Emerging	Brunel University London	Harper Adams University	Round 1
South Wales Compound Semiconductor (SWCS) Place Based Impact Accelerator	South Wales	Established	Cardiff University	Swansea University	Round 1
Tay Health Tech	Tayside region	Emerging	Heriot Watt University	Edinburgh Napier University, NHS Tayside, University of Dundee, University of Glasgow, University of St Andrews	Round 1
The LINCAM AgTech Cluster	Greater Lincolnshire and North Cambridges hire	Established	University of Lincoln	University of Cambridge	Round 1
The SWITCH to Net Zero Buildings	South Wales	Established	Swansea University	Cardiff University, Swansea University, University of South Wales	Round 1



4.3. Process review findings

This section outlines the findings from our process evaluation which focuses on how the consortia were designed and set up, the funding application process and unique challenges and lessons learned around delivering their PBIAAs in a consortium within a place-based framework.

4.3.1 Set up and implementation

4.3.1.1 Designing the PBIAAs

The PBIAA scheme was developed as a mechanism to connect EPSRC research outputs with places. EPSRC staff developed the design of the PBIAA scheme through iterative stakeholder engagement with civic and academic stakeholders. This likely contributed to the PBIAA scheme being well received by applicants. EPSRC staff interviewed said that the number of applications received (c.100 across both rounds) was positive, and applicants largely understood the aims and objectives of the PBIAA scheme. Consortia members interviewed reflected positively on EPSRC creating a place-based scheme, stating it has the potential to generate greater impact, and address place-based challenges.

"A relatively small investment [PBIAA scheme] can leverage more activity than it would normally leverage because of the scale and interconnectedness of the sector already. The fact that we're fuelling a fire that's already lit means that we should be able to get greater impact than if this was a diffused national programme." — Consortia member

EPSRC staff felt that a place-based approach would fit well within the engineering and physical sciences (EPS) space as many of the clusters in the UK are connected to an EPS discipline. This was supported by consortia members interviewed who felt that place-based working was complementary to their scientific discipline. Interviewees also highlighted a series of place-based EPS skills gaps, which they will seek to address through the delivery of their PBIAA.

Consortia had varying experiences and processes to design their approaches ahead of applying for the PBIAA grant. Consortia had to demonstrate that their PBIAAs would address local challenges and drive economic growth in their region. This was reflected in interviews in which some interviewees highlighted specific social or economic challenges their PBIAA sought to address such as high unemployment or poor health outcomes. Other interviewees cited high growth potential as a key driver for setting up their PBIAA. This was characterised by a strong existing academic cluster, industry group, supportive civic entities or a combination of the three.

Key findings: Consortia in areas with established industrial clusters found it easier to define the scope of their PBIAAs.

Some interviewees indicated that it was a challenge to define their scope of activity both in terms of the outcomes they wanted to achieve as well as selecting the place in which they would deliver their PBIAA. These tended to be from emerging clusters. Multiple interviewees from emerging clusters said that they gathered key stakeholders from their place to co-create their PBIAA by starting with a broad (EPS area, and narrowing down to a more specific area, which their PBIAA could focus on. An example of this was the EMERGE PBIAA, which started the co-creation process focussing on medical technologies, before narrowing to rehabilitative medical technologies, to align with their place-based assets. Interviewees from established clusters said that whilst they did perform a co-creation process, they did not have to narrow their focus in the same way emerging clusters did, as they already had a strong understanding of their cluster, and what their specific EPS specialty was. EPSRC staff interviewed noted that when selecting PBIAAs to be funded, they prioritised proposals with strong co-design.

"We did a lot of group thinking [on the design of the PBIAA]. We were doing the Theory of Change. We had innumerable meetings and workshops. I think it was really good because we got to know each other better. When we got the funding, we were good to go because we were already a storming team by that point" –

Consortia member



Lessons learned: Co-designing proposals with consortia members and local stakeholders promotes a more focussed PBIAA approach. It can also help consortia members familiarise themselves with each other, allowing for quicker set-up and delivery.

Geographic area to be covered was also a key consideration when designing PBIAAs. One interviewee cited the wide geographical area of their PBIAA being necessary for the overall impact they wanted to deliver; however, they recognised that covering this area would cause additional logistical challenges such as additional travel costs in setting up the partnership. Others highlighted nuances in selecting PBIAA areas based on economic deprivation, for example, operating in a region which has an affluent urban centre but deprived rural areas.

"We exclude the city [region], because that is an outlier in every respect. But if you go in the rural region...it's got exactly the same economic geography and social geography [as other places of high deprivation]." – Project Lead

Lessons learned: PBIAAs that cover larger geographic areas may require additional administrative resource to effectively collaborate across their cluster. This should be considered by applicants when planning the geography and budget for their PBIAAs.

Some interviewees raised challenges of their thematic area being applicable beyond the place selected, for example, places working in biomechanics or in the health industry that apply to all settings with health challenges in the UK. These interviewees felt limited by the place-based objectives of the grant as it added a layer of complexity when partnering with stakeholders outside their region. While they may be well placed to contribute positively to the goals of the PBIAA, partners outside the region had to demonstrate how their activities would benefit the selected place. However, these PBIAAs cited positive factors of a regional focus, such as proximity to local partners (eg, business associations or local civic actors), being able to use consortium members' facilities and established local networks.

"We have seen industries outside of the region that we think would make quite a good match and we can't really see how that would then fit into the scheme. But with us all being regional, I think it makes things a lot easier to deliver on because it's just so much easier to have those interactions...to open someone else's lab, etc." – Project Lead

Key findings: PBIAAs highlighted flexibility, collaboration and being able to address local needs as key benefits of a place-based approach.

Interviewees noted that the requirement for PBIAAs to have at least two collaborating higher education institutions (HEIs), as well as collaborations with civic bodies encouraged them to be more collaborative with these types of partners than they had been with traditional IAA funding⁴. Interviewees from HEIs who had previously not had access to IAA funding expressed that the PBIAA scheme is a great opportunity for them to demonstrate their capabilities and contribute to their clusters' growth. Interviewees from HEIs who have had access to IAA funding appreciated the opportunity to collaborate with HEIs who had not previously.

"We've partnered with a [HEI who have not previously had access to IAA funding]. This has given them opportunities that I don't think they would have had previously. They've been given access to IAA funding, and they are taking advantage of it, which is great to see" – Project Lead

EPSRC staff interviewed said that the PBIAA scheme was designed to be complementary to the traditional IAA funding. This sentiment was echoed by multiple interviewees, who felt both types of IAA funding were valuable to the EPS space.

Other observations from interviewees included the flexibility of the grant conditions and long timeframe as key benefits to the place-based approach when compared to other types of public funding, which tend to have significant restrictions. Interviewees suggested the PBIAA model gave them more autonomy to set the agenda for their PBIAAs and encouraged bringing in diverse perspectives to ensure PBIAAs are meeting the

⁴ See https://www.ukri.org/what-we-do/browse-our-areas-of-investment-and-support/ukri-impact-acceleration-accounts/



needs of all stakeholders in their region. Finally, some interviewees observed that the criterion for PBIAAs to be of benefit to the UK in the long-term was helping to shift the mindset of academics in how they approached research.

"Sometimes blue-sky research is good, but it's always good to see what can be done with that research in the long-term. And these PBIAAs enable this." – Project Lead

4.3.1.2 Setting up the partnerships

Key findings: PBIAAs in established cluster areas found it easier to set up their consortia. Civic partners are essential for strengthening the PBIAA and bringing other partners to the table.

A key eligibility criterion for the PBIAA funding was to bring together academic, industry and civic partners. Consortia went through different processes to set up partnerships and build networks ahead of their applications to EPSRC. When engaging civic partners, some consortia cited alignment between their PBIAA objectives and regional economic objectives as being a key facilitator in establishing their consortium. This facilitated buy-in from civic actors (e.g. combined authorities, chambers of commerce, local councils) and encouraged positive engagement. The requirement to involve civic bodies in consortia was received positively from consortia members interviewed who could see the benefit of involving civic bodies in relation to growth strategies, policy engagement, attracting inward investment and facilitating planning permission.

Interviewees from PBIAAs who identified as established said they found it easier to engage civic bodies due to pre-existing relationships and a proven track record of partnership/delivery. This was more challenging for some PBIAAs who identified as emerging clusters, reporting needing a higher-than-expected level of effort to engage civic bodies. Partners also cited policy changes such as phasing out of Local Enterprise Partnerships (LEPs) in April 2024 and English devolution as a key challenge as it required them to adapt their initial civic engagement strategies. Whilst interviewees cited this as a challenge, they also recognised it as an opportunity to promote their EPS area within their local civic infrastructure, so the growth in their EPS area is a priority going forward. Interviewees found that where civic partners had limited disruption to their operations, high levels of engagement from civic partners continued into delivery.

"Just like industry and universities, [civic bodies] are really cash strapped...They have to decide where their focus is...part of our role is to help them understand why they should be involved in hydrogen and why that's important." – Project Lead

Some interviewees suggested EPSRC's broad definition of civic bodies was beneficial to helping them apply in places where traditional civic partners, like Local Authorities had limited capacity to engage. For example, including organisations with a civic mission like local business groups. Interviewees also cited the value of civic partners being able to bring together different actors and facilitate building a consortium. Some interviewees said that their contacts within civic partners have a relevant EPS background to their cluster, which helped facilitate close collaboration.

"The Combined Authority acts as facilitator – instead of academics chasing companies one-by-one, the civic partner brings the whole cluster to the table." – Project Lead

Some PBIAAs had Project Leads or other consortium members who had previously worked in industry, which helped to facilitate PBIAA collaboration with industry, through networks and connections. Interviewees who said that their cluster was characterised by a high-level of SMEs found that including industrial cluster representative bodies was an effective way to secure industry input, rather than engaging many SMEs, which could become unmanageable.

Emerging lesson learned: Understanding the impact of the PBIAA approach on academia will be as important as understanding the impact on industry and civic bodies.

Emerging lessons learned: Prior experience of industry engagement within consortia leadership teams accelerates cluster mobilisation and enhances potential for spinouts and commercialisation.



4.3.1.3 Application processes

Key findings: Most interviewees felt the application process was proportionate to the amount of funding, though a few interviewees said that it took longer than expected. Emerging clusters cited a higher level of effort to develop their applications.

Interviewees were asked about their experience of applying for their PBIAA grant via an online survey and interviews. Survey respondents reported mixed views on the time taken for the application with 56% suggesting it met their expectations while others suggested it took more time than expected (44%). This is in line with interview findings, although this is caveated by respondents suggesting the overall level of effort to write the proposal was proportionate to the grant available, particularly given it is public funding. Interviewees from established clusters said that pulling together their abundance of documentation was a time-consuming task in their application proposal. In contrast, interviewees from emerging clusters felt they had to put more time into their applications to set up new partnerships and build networks. These interviewees cited limited staff capacity due to funding pressures from universities.

"It is becoming more challenging in the present economic climate because...you've got to find funding for the rest of your time. Academics get pulled in lots of different directions because they don't have the funding. Not a lot of money has been allocated into the marketing and comms aspect to get people engaged so that's tough. Only 10% of the budget could be spent on salary." – Project Lead

Others less familiar with the IAA model found the application process different to the funding calls they normally apply to, which presented new challenges. Support services from universities was also cited as a major positive factor by interviewees, particularly in terms of legal agreements and logistics.

"The process for submitting and shaping the proposal worked well in the time frame because there was support within the university and across the universities." – Project Lead

As part of the application process, applicants were required to self-select whether they were applying as an emerging or established cluster. EPSRC did not provide a strict definition of what constitutes an emerging or established cluster. Interviewees defined their clusters using multiple factors including, the extent of pre-existing networks and collaboration, the track-record of spin-outs in the cluster, the ability of their cluster to attract funding, and level of recognition of the cluster, both domestically and internationally. Some consortia assessed this qualitatively, whereas others used published research, such as skill gap assessments and science and innovation audits⁵.

Lesson learned: On reflection, interviewees felt that they had correctly self-identified the maturity of their cluster, suggesting the characteristics listed above are strong indicators of whether a cluster should be identified as emerging or established.

Key findings: EPSRC provided robust support to PBIAA applicants with many citing the panel feedback process as useful and pre-application briefings as key to helping them define their scope.

EPSRC provided various forms of guidance and support for applicants. Most respondents felt the volume of communications from EPSRC was as expected (67%) with fewer suggesting it was lower than expected (22%), and just 11% thinking.it was higher than expected Two-thirds of survey respondents agreed that communications from EPSRC were timely or faster than expected. This aligns with interview findings, in which interviewees highlighted pre-application briefings, guidance videos, responses to clarification questions and panel feedback as key elements of support from EPSRC.

4.3.2 Delivering the PBIAAs

4.3.2.1 Working as a consortium

Key findings: Despite some challenges, PBIAAs interviewed were able to effectively facilitate collaboration between academic, industry and civic consortia members.

 $^{^{5}} See\ https://www.gov.uk/government/collections/science-and-innovation-audits\#full-publication-update-history$



Interviewees recounted a range of different ways of working with their consortia, with some consortia having very regular meetings, and others having meetings on a less regular, or ad hoc basis. This was supported by the baseline survey:

Table 3 – Consortia engagement, baseline survey

How often do you meet Responses as a consortium? (n=84)More than once a week 0% 8% Once a week 10% Once every 2 weeks Once a month 33% 22% Once every 2-3 months 9% Less than once every 2 months Other 6% Doesn't/not yet met 13%

Figure 1 – Opinions on consortia engagement, baseline survey

How would you rate the frequency of meetings? (n=89)

About the right level of frequency



Please indicate the level of collaboration of organisations within your cluster to deliver your project. (n=93)

Very high collaboration and high collaboration



As shown above, most baseline respondents meet with their consortia either once a month, or once every 2-3 months. 89% of baseline respondents felt that their level of engagement with their consortium was about right, which suggests that consortia governance structures are able to effectively assess and implement an appropriate consortia engagement strategy.

Interviewees said that forming an advisory/oversight board was an effective mechanism to facilitate continuous engagement from members of their consortium. These boards vary in size, with larger boards involving most partners from the consortium, and smaller boards having representatives from each stakeholder group (academic, industry and civic). These boards are kept updated with upcoming activities within their consortium and are given the opportunity to give feedback on these activities. Interviewees said that this was useful to:

- Give civic and industry stakeholders opportunities to influence consortia activity to be better tailored to the needs of the cluster, helping to avoid "blue sky research", in line with the objectives of the PBIAA scheme: and
- To leverage the wider capabilities of academic, industry and civic partners within the consortium, so activities can be delivered with greater impact.

A few interviewees said that in the early stages of setting up their PBIAA, their management board met frequently (weekly), which was essential as there were multiple activities been designed and set-up, which

⁶ Research without a clear objective or real-world application.



required input from the board. Since, these interviewees said their advisory board's meet less frequently (monthly) as there are fewer activities to provide feedback on.

Some interviewees said that their advisory board are supported by a group of sub-committees, which focus on aspects of their PBIAAs delivery, such as technical projects and training. Where this is the case, the sub-committee is responsible for designing an activity, which is subject to review by the advisory board.

Emerging lesson learned: Establishing consortia advisory boards consisting of stakeholders from academic, industry and civic backgrounds can be an effective mechanism to promote regular and effective collaboration.

Interviewees said that collaboration between academics within the consortia is strong, with many having pre-existing relationships from before the PBIAA scheme. Interviewees from both emerging and established clusters said that they have formed new relationships with academics from different universities through the PBIAA scheme, which has also fostered strong collaboration. A few interviewees cited the unit funding per academic as a barrier to collaboration, as it constrains the amount of time academics can spend collaborating.

"The unit funding per academic is not good...therefore there's a lot of pressure on academic staff time to deliver what is a very ambitious programme.... There are some established clusters with fewer people involved, so their unit income for their academic teams is higher. So, we [as an emerging cluster] have got a big team [which reduces the unit funding per academic]." – Project Lead

Emerging lesson learned: There is a balance to be struck when proposing academic teams for this type of funding. Larger academic teams have the potential to foster greater collaboration. However, this can be hindered by the lower unit funding per academic in larger teams.

Interviewees were positive about the benefit that civic partners are contributing to their consortia. Interviewees said that involving civic bodies in their consortia helps to strengthen the consortia's focus on place, contribute to policy documents/lobbying and encourage cluster growth by attracting investment into the region.

However, interviewees noted that there are some factors which have hindered their ability to collaborate with civic bodies. Firstly, changes in local government and non-statutory body (such as Local Enterprise Partnerships [LEPs]) structures meant that some civic partners involved in the applications for the PBIAA scheme were dissolved or restructured. This meant that some PBIAAs had to find new civic partners during the delivery of their PBIAA, delaying some aspects of delivery, such as setting up advisory boards. This was easier for PBIAAs who had their original civic partner contact transfer to a new civic body, highlighting the importance of personal relationships with stakeholders from civic society.

A few interviewees also noted that whilst civic partners are supportive, due to strained capacity, some civic partners struggle to engage in the PBIAA. This is partly reflected in the baseline survey, which shows 37% of respondents feel that civic engagement informs their PBIAA activities either always or almost always:

Table 4 - Civic engagement, baseline survey

How often does your consortium engage the public / civil society to inform project activities? (n=93)						
Never	Almost never	Sometimes	Almost always	Always	N/A	
0%	2%	28%	23%	14%	33%	

PBIAAs were also able to effectively engage with industry partners within their consortia. Industry partners included SMEs, large corporations and industry representative bodies. Industry partners are involved in PBIAAs in a range of ways, including providing industry insight to advisory boards, giving feedback on proposals, and providing/receiving capability building training (see Yorkshire MedTech and SWCS case studies). Interviewees said that engaging industry partners within their PBIAAs' calls for proposals



(discussed further in section 4.3.2.4) was useful to sense check whether PBIAAs were addressing real commercial needs, that would contribute to cluster growth.

Nevertheless, interviewees did cite some barriers that reduced their ability to collaborate with industry. A few interviewees said that industry can have rapidly changing priorities, so industry partners' level of commitment at the application stage may change over the lifetime of delivery. Additionally, interviewees noted that delivery timelines are different in an academic context (which tends to have longer delivery timelines) and an industry context (which has shorter delivery timelines). Interviewees said that this can create a tension, which needs to be effectively managed by their consortia leadership teams. Project Leads noted that these barriers to engaging with industry are not unique to the PBIAA scheme, with similar barriers experienced during other academic-industry projects they have led.

Emerging lesson learned: Industry and civic bodies have different ways of working to academia, which can cause barriers to collaboration. Strong leadership, coordination and planning within consortia can help to overcome these barriers, allowing for effective collaboration within consortia.

4.3.2.2 Setting up partnerships and collaborations

Key findings: PBIAAs interviewed have been successful in using launch events, workshops and webinars to help set up new partnerships and collaborations.

PBIAAs interviewed had mixed experiences establishing new partnerships and collaboration, which is reflected in the baseline survey:

Figure 2 – New partnerships formed, baseline survey

Has your consortium formalised any new partnerships as a result of the PBIAA funding over the past 12 months? A new partnership could be with any organisation, private or public. (n=93)



Most respondents who indicated their consortium had formalised new partnerships since starting delivery said they formalised 5+ new partnerships, with some formalising 20+ new partnerships.

Multiple PBIAAs interviewed held launch events, which interviewees viewed as important to gathering early interest in their PBIAAs from academic, civic and industry stakeholders. Interviewees felt their launch events were well attended, with multiple interviewees reporting 100+ attendees. Interviewees attributed the success of these launch events to their targeted marketing strategies, which included leveraging personal connections, and email and social media campaigns. Interviewees also said that recruiting high profile speakers from a range of academic, civic and industry backgrounds was useful for attracting attendees.

"[The launch event] was standing room only and there was a really good buzz. There was lots of networking, people talking to each other, people talking to the team. They were really interested to know about how [the PBIAA] was going to work. They were interested in our funding calls and how they might collaborate." —

Project Manager

PBIAAs from established clusters tended to hold launch events entirely dedicated to their PBIAA, as their established connections assured them, they could attract a range of attendees. PBIAAs from emerging

⁷ The high proportion of 'don't know' responses is likely a factor of some Round 2 consortia respondents having not started delivery at the time of completion, as well as irregular meeting intervals meaning respondents were not aware of latest figures, and some respondents being more distant to this type of information.



clusters tended to have smaller, consortia-focussed launch events, or use pre-existing events as a platform to launch their PBIAA. NESCA were able to launch their PBIAA at a conference held by their civic partner, which interviewees felt helped them reach a wider audience than they otherwise would have (see NESCA case study).

Emerging lesson learned: Launch events can be an effective tool to stimulate early interest in PBIAAs, which can develop into formal partnerships and collaboration.

Interviewees noted the importance of capitalising on the initial momentum gained through the launch events, through regular engagement events, such as workshops and webinars. These workshops and webinars were viewed as particularly important for early-stage academics to develop their relationships, which can progress into partnerships and collaborations. These interviewees noted that early-stage academics rarely have these networking opportunities, so this was a unique benefit of their PBIAA approaches.

"This project is giving a platform to early career researchers to showcase their research and to have access to industry contacts, investors, venture capitalists that they wouldn't normally have had through a standard PhD or a postdoc...they're invited to come and speak at our webinars, which are attended by both industry and academia, so they're getting that platform to speak about their research" – Project Manager

PBIAAs are also attempting to promote new partnerships and collaborations through their calls for project proposals. Multiple interviewees said that having an industry or civic partner was a requirement for the projects they are funding. Interviewees said this helped to promote new partnerships/collaboration and focus projects on areas which could have commercial benefit.

Some early difficulties with promoting new partnerships and collaboration with academia through the Collaboration Fund⁸ were reported during interviews. Whilst some interviewees had not launched their Collaboration Fund at the time of data collection, a few had experienced some difficulties. This included struggling to gather interest in calls for proposals, and lower quality proposals been submitted from non-consortia university academics. The implementation of the Collaboration Fund is explored further in section 5.2.1.

A few interviewees from emerging clusters felt they have needed to invest more time and resource into promoting new partnerships and collaboration in comparison to established clusters. These interviewees said that they have fewer pre-existing relationships that they can use to facilitate new relationships, so have to dedicate more resource to building a network. Consequently, some of these interviewees felt that the budget for emerging clusters should not have been half of what was available for established clusters as they need more resource to grow the networks within their cluster.

Emerging lesson learned: Growing networks and forming new partnerships and collaboration needs to be well resourced when trying to grow clusters. The resource required for this may be higher for emerging clusters compared with established clusters.

Interviewees also noted that there are a few barriers to collaborating with industry. One interviewee summarised the challenges of working with industry:

"The problem with working with SMEs is they rarely have much cash flow. By definition, they're small, so they can't make too much of a change... There's also the converse of that with big companies... sometimes they're difficult to deal with for a different reason because they are so big, and their decision tree goes up and up and up - it takes an age for anything to get decided." – Project Lead

Interviewees who noted these challenges highlighted that the challenges are not unique to the PBIAA scheme.

⁸ It was a requirement of the PBIAA scheme that some funding had to be set aside for funding projects from non-consortia universities. This is known as the 'Collaboration Fund'.



4.3.2.3 Delivering in a place-based context

Key findings: Delivering in place is helping consortia rapidly grow their cluster network, and tailor the activities of their PBIAA to meet the needs of stakeholders within their cluster.

Interviewees said that they have experienced multiple benefits from working within a place-based context. This included efficiency benefits of being able to meet and network in-person, which helps to expedite delivery timelines and form stronger, more engaged networks.

Interviewees said this has helped their consortia to understand the problems faced by industry within their cluster, and work with industry on solutions to these problems. A few interviewees said that the PBIAA scheme is flexible in how funding can be spent, which allows them to respond to the needs of industry. This allows them to create a more coherent package of activities designed to fully support their cluster. Interviewees gave examples such as designing training programmes that are designed to address place-based skills gaps that were highlighted through engagement with industry (see SWCS case study).

Despite these benefits, interviewees also highlighted some challenges of working in a place-based context. Interviewees from PBIAAs that cover a wide, multi-county geographic area said that managing their consortia can be difficult. This was because they are not able to meet in person as regularly as smaller geographic clusters, so do not benefit from the efficiency gains mentioned above. Additionally, a few interviewees highlighted that wider geographic areas are less likely to be homogeneous, so different parts of a cluster can experience different challenges. This emphasises the importance of engaging with civic and industry stakeholders to understand any variance in challenges faced by different parts of the cluster.

Consortia that cover smaller geographic regions also faced some challenges in delivery. Interviewees from these consortia highlighted that there are a smaller number of potential collaborators within their geographic remit, so it can be difficult to find companies to collaborate with. These interviewees also highlighted that they are expecting some challenges with the delivery of their Collaboration Fund. As their calls for proposals will require projects to have a specific benefit to the geography of their cluster, these interviewees expect that proposals from academics from other universities will struggle to demonstrate what the benefit of their projects will be to the geographic area of the cluster.

Interviewees highlighted that recruiting a strong support team has been integral to the setup and implementation of their PBIAAs. Interviewees who feel that they have a strong project management team, highlighted the importance of having more than one full-time equivalent (FTE) in project management roles (e.g. project managers and business development managers), due to the complexity and scale of the PBIAAs. These teams included personnel in project management, administrative and business development roles. Project managers interviewed that are not supported by a business development manager highlighted that they have limited time to build and facilitate relationships/collaboration and would benefit from the addition of a business development manager to coordinate this. Interviewees from emerging clusters noted that the budget they have available for support staff is leading to difficulties with project management and relationship building. These interviewees said that whilst they had half the budget available for project management costs compared with established clusters, the time required for project management and business development is comparable. Consequently, these interviewees said that they have less capacity to facilitate network growth.

"There is a programme manager, a business development manager, and a couple of administration posts [in the PBIAA]. It is really beneficial from our perspective, because there is someone there that is keeping on top of the administration and keeping on top of everything that we are doing...when it is everyone's responsibility, it can become no one's responsibility, so I really appreciate the structure" – Consortia member

Emerging lesson learned: Having an effective business support team is important to the effective coordination of PBIAAs. Where possible/appropriate, business support teams should look to include project managers, administrative support and business development managers.



Emerging lesson learned: Emerging PBIAAs require comparable levels of project support time to established clusters.

In March 2025, EPSRC held a workshop in Edinburgh to bring together all PBIAA funded consortia members. EPSRC staff interviewed said the aim of the workshop was to foster "ecosystem development" and "connectivity". Consortia members interviewed said that the workshop helped to facilitate greater collaboration and stronger relationships within their consortia. These interviewees from Round 2 PBIAAs said that their PBIAA sent multiple consortia members to the workshop, which helped them solidify relationships before starting the delivery of their PBIAA. Consortia members interviewed also said the workshop helped facilitate collaboration between PBIAAs. This has included Round 2 project managers seeking advice from Round 1 project managers, and academics from one consortium applying to the Collaboration Fund of another consortium.

Emerging lesson learned: Facilitating in-person workshops early into the delivery of a scheme for consortia members to convene can help facilitate relationships which can be leveraged throughout the delivery of the scheme.

4.3.2.4 Allocating funding

Key findings: Round 1 PBIAAs interviewed said they were successful in launching their calls for proposals early in the lifetime of their PBIAAs, so that smaller projects have time to mature into larger projects.

All PBIAAs interviewed are taking slightly different approaches to allocating funding. The most common approach used by interviewees was to have phased calls for proposals, with different levels of funding available for each call. The smallest calls for proposals tended to be for up to £10,000 and were for proof of market and proof of principle work. Larger calls for proposals were for between £40,000 and £100,000 and were for proof of feasibility and proof of concept work. As PBIAAs are still in their early stages of delivery, interviewees said that currently their focus is on the smaller projects, with the objective of having these projects mature into larger projects that secure funding from the larger PBIAA calls for proposals, or from elsewhere.

Most PBIAAs interviewed were keen to fund as many projects as possible in the early stages of delivery. Interviewees said that this should allow time for projects to mature, which does not happen on other comparable schemes where funding is distributed towards the end of the scheme. As a result, at the time of data collection, multiple Round 1 PBIAAs had already completed at least two calls for proposals. The extent to which this early-stage review can assess whether these smaller projects have matured into larger projects is limited due to the timeline of this early-stage review.

A secondary reason PBIAAs launched their calls for proposals early into delivery was so that they could identify lessons learned and implement improvements into their future calls for proposals. Interviewees said that they made changes to their calls for proposals and the support surrounding those calls so that they can more effectively allocate funding.

Interviewees said that initial calls for proposals highlighted skills gaps in early career researchers around understanding of industry needs, commercialisation, responsible research and innovation, and demonstrating economic or social benefit to a geographic area. In response to this, multiple PBIAAs increased their support offering to potential applicants. This included offering:

- Mentoring, where potential applicants could seek feedback on their ideas prior to submitting their proposal;
- Workshops and webinars led by academic and industry experts with experience in areas such as commercialisation and IP (see LinCam AgTech and Yorkshire MedTech case studies); and
- Access to businesses/end-users so potential applicants can test whether their idea forms a solution to a real-world problem.



Emerging lesson learned: Providing training to support early-stage academics to develop their knowledge and understanding of commercialisation and place can increase the quality of project proposals.

Interviewees also said that they changed some of the administrative side of their calls for proposals in response to lessons learned. Examples included adding an expression of interest phase so training can be targeted at applicants, changing wording of questions to be better understood, and changing to funding allocation available

Round 1 PBIAAs said that they have generally been effective so far in attracting proposals. Interviewees said that they have taken multiple approaches to promote their calls for proposals, including using social media (such as LinkedIn) and holding seminars on the campuses of their various academic partners. Interviewees from established clusters noted that attracting initial interest was easier for them as some academics already had well-formed project proposals but were waiting for an appropriate funding call to open. In a few cases, academics said that in early calls for proposals, they have struggled to attract interest from academic partners they had not had much previous engagement with. To address this going forward, these consortia are planning to have more targeted promotion to academics from these institutions.

Interviewees reflected positively on their proposal assessment process. Many Round 1 PBIAAs built on procedures they had used for previous calls for proposals, which interviewees felt was effective. PBIAAs looked to build diverse assessment panels, including stakeholders from industry and civic society, so that proposals contribution to the cluster can be comprehensively assessed.

4.4. Summary and lessons learned



Designing PBIAAs with a place-based approach:

- The design of PBIAAs was deeply influenced by their local context. EPSRC's engagement with civic and academic stakeholders resulted in the PBIAA scheme being well-received by participants.
- In regions with established industrial clusters—such as photonics in Scotland or medical
 manufacturing in Sheffield—consortia found it easier to define their scope and align with regional
 strengths. These clusters provided a natural foundation for collaboration, enabling consortia to
 build on existing networks and infrastructure.
- Some consortia initially struggled to define their geographic and thematic focus, especially when their research had broader relevance beyond their desired region or where there were overlapping socio-economic contexts. PBIAAs noted EPSRC's support in helping them refine their scope of work.
- Many PBIAAs appreciated the proximity to partners and the ability to leverage local facilities and networks as key benefits.
- The place-based model was seen as more collaborative and less siloed than traditional funding approaches, offering greater flexibility and responsiveness to local needs.



Building partnerships across sectors:

- Civic partners played a crucial role in bringing in industry and other partners, especially in regions
 where their economic priorities aligned with PBIAA goals. Civic partners with individuals from
 relevant EPS backgrounds were particularly effective.
- The phasing out of Local Enterprise Partnerships (LEPs) and ongoing English devolution created uncertainty, requiring consortia to adapt their strategies.
- In some cases, the expanded definition of civic partners—such as local business groups—proved helpful, particularly in areas with limited local government capacity.



- Consortia's experience of engaging industry was mixed. While small and medium-sized enterprises (SMEs) were often enthusiastic and agile, larger corporations posed challenges due to complex governance and slower decision-making, particularly around signing memoranda of understanding, IP and collaboration agreements.
- PBIAAs led by academics with prior industry experience found it easier to navigate these dvnamics.



Experience of the application process:

- Most PBIAAs were satisfied with the application process. While some felt the level of effort was high compared to other grant applications, they felt it was justified by the scale of funding.
- Emerging clusters faced challenges such as limited staff capacity, tight travel budgets, and the need to build new networks, making the process more demanding.
- Support from universities and clear guidance from EPSRC were critical enablers, helping applicants manage legal and logistical complexities and focus their scope of work.



® Working as a consortium:

- Once funded, consortia adopted a variety of governance models. Most meet regularly—monthly or bi-monthly—and many established advisory boards with representatives from academia, industry, and civic sectors. These boards helped ensure that PBIAAs remained grounded in real-world needs and avoided overly abstract research.
- Collaboration among academics was generally strong, especially where pre-existing relationships existed.
- In emerging clusters, new connections were forged, though limited funding per academic sometimes constrained deeper engagement.
- Civic partners added value by anchoring PBIAA approaches in local policy and helping attract investment, though their capacity to engage varied.
- Consortia with strong project management teams saw better coordination and delivery of their projects.



Delivering in a place-based context:

- The place-based nature of PBIAAs brought both benefits and challenges. In smaller geographic areas, consortia benefited from easier in-person collaboration and faster decision-making. However, they also faced the challenge of a smaller number of potential collaborators within their geographic remit.
- Regions covering a wider geographical area faced logistical hurdles, such as not being able to meet in person as regularly, and greater diversity in local needs.
- Irrespective of size, having a strong support team including project managers and business developers was seen as essential to effective delivery. It is important to allow for an appropriate project management/support budget to encourage this.
- Emerging PBIAAs require comparable levels of project support time to established clusters.

ந்ரி Fostering new partnerships and innovation:

- PBIAAs were proactive in launching events, workshops, and webinars to spark new collaborations. These efforts were particularly valuable for early-career researchers, offering them rare opportunities to connect with industry and civic stakeholders.
- Many consortia allocated funding to fund smaller, early-stage projects, with the aim of nurturing them into larger initiatives or seed spin out activity.



Training in commercialisation and place-based impact was provided to applicants to improve the
quality of applications and to build long-term capacity. Training included mentoring and workshops
around commercialisation and how to write proposals that demonstrate that there will be economic
or social benefit to the geographic area.



5. Early impact findings

5.1. Overview of data used and notes on interpreting the findings

This section draws on findings and insights from 35 interviews with consortia members from PBIAAs, 93 responses to the baseline survey and PBIAA application forms. Most early impact evidence stems from Round 1 PBIAAs as they had a longer lead-time to deliver their PBIAAs at the time of writing this report. Several Round 2 PBIAAs were still in early delivery stages, so findings remain skewed to short-term outcomes or outcomes related to establishing their consortia. While we have evidence of activities delivered, the timeframe of this early-stage review means it was not possible to follow-up on the outcomes or longer-term impacts of funded activities.

5.2. Consortia outcomes

5.2.1 PBIAA activities

Key findings: Round 1 interviewees said that their PBIAAs have started the delivery of most of their activities. However, some activities such as secondments, policy engagement and the Collaboration Fund have required a longer lead in time than anticipated.

Capacity Building

As part of their capacity building strategies, consortia have developed and started delivering multiple activities. Interviewees said they conducted scoping exercises to find out what aspects of their cluster required capacity building. These identified areas are being targeted through the following activities:

Mentoring: Most interviewees said that their PBIAAs were using mentoring to help build the capacity of academics within their PBIAAs, for example, by increasing their commercialisation skills. Multiple interviewees said that mentoring is integrated into their calls for proposals. Interviewees felt this mentoring has helped recipients with their bid writing, and their commercial and industrial understanding, helping academics to write well-rounded proposals.

Workshops and training: Most Round 1 interviewees said they have delivered multiple workshops and training sessions, targeting a range of audiences and capabilities. Some PBIAAs are targeting similar capabilities, such as understanding of industry and commercialisation. For example, training for early-career researchers on IP, CE marking, and business planning (LINCAM). In contrast, some are targeting capabilities that are specific to their PBIAA, such as Patient and Public Involvement and Engagement (PPIE). Interviewees said that a key facilitator to workshop and training delivery was collaboration with industry stakeholders, from both within and outside of their consortia. For example, a four-day training led by Tay Health Tech that brought together both academics and industry partners to address a gap in knowledge on medical device regulation.

Collaboration and co-delivery of workshops and training with industry was particularly effective for sessions that aimed to increase academics understanding of challenges faced by the industry. A few interviewees said they have delivered some training sessions to industry to help upskill workers. However, most interviewees (particularly those from Round 2) said their PBIAAs have not yet started delivering these training sessions to industry due to the lead in time, relationship building, scoping and planning that needs to happen beforehand.

"we've up-skilled a number of people to be able to do some of these very complex processes using the cutting-edge tools that we have" – Consortia member

Secondments: While many interviewees suggested they had secondments planned, most suggested that they had not started delivering these yet. When secondments do start, interviewees said that they plan to offer them between academia, industry and civic bodies to enable cross-learning and mutual benefit.



Respondents cited the longer than expected lead in times required to set up secondments as a barrier to setting up secondments within the first year of PBIAA delivery. Some interviewees are also facing challenges with secondments from academia to industry. This has been attributed to pushback from some university departments suggesting secondments can be difficult as they require academics / staff to step away from their busy day-to-day work for a period of time. A challenge from industry is around sharing of IP with academics who may utilise it for their own commercial purposes once the secondment period ends.

Emerging lesson learned: Activities that require large input from industry stakeholders, such as training delivered to industry and secondments require longer lead in times, compared to other capacity building activities.

Awareness and networking

Interviewees said that delivering workshops has been an effective method of building awareness and networking. Workshops delivered by interviewees' PBIAAs looked to attract specific sub-groups of their clusters, through targeted identification and marketing towards companies within the value chains of their clusters. Most interviewees said that a targeted marketing approach, focussing on companies relevant to the technology of their cluster, has been successful so far in attracting companies they have not previously engaged with. A few interviewees suggested a different approach where they focussed efforts on entities that focus on business support rather than specific companies, allowing them to reach a broader network. A few interviewees cited partnerships that have formed as a result of delivering a workshop (See IBIC case study).

"I think that we've done a good job in picking up not only companies or organisations that clearly have an interest in [our sector], we've also tried to pick up companies in the value chain that may not immediately view themselves as being part of that value chain, but could potentially be involved" — Consortia member

"This relationship builder was not just getting together and talking. Every time that we got together, we came up with an idea, and then we go to a lab." – Consortia member

Interviewees also said that their civic partners have played a key role in growing awareness of their PBIAAs, and their clusters more generally through attending various non-PBIAA delivered events. Interviewees from civic society backgrounds said that they are using the events that they normally attend as part of their normal activities as an opportunity to promote the work being delivered by the PBIAAs.

Emerging lesson learned: Civic bodies are well positioned to help grow awareness of the PBIAAs, both within and outside of their cluster.

Policy and public engagement

Round 1 interviewees reported varying levels of progress relating to policy and public engagement. Interviewees from PBIAAs that have started their policy and public engagement said that connections held by both Project Leads and civic body consortia members have been key facilitators that contributed to them being able to start public and policy engagement early in the lifetime of their PBIAAs, for example, Tay Health Tech's Citizen's Assembly and NESCA's civic-led event that attracted over 600 attendees. Whilst some of this initial engagement has started for some PBIAAs, for example discussing cluster issues with the House of Lords and MPs, and drafting policy papers, interviewees noted that it is still too early to have delivered any impact as a result of these activities. Some PBIAAs are engaging with the wider public through their activities, for example, through partnerships with museums or NHS trusts (see PQA case study).

"The policy stuff has been really positive because of how difficult it is normally to engage with policy makers." - Consortia member

There is emerging evidence of some PBIAAs looking to influence internationally with a view to bringing foreign investment into the UK, for example, LINCAM was invited to present at the British Embassy in the Hague and was involved with a UK-US trade discussion around ag-tech (see LINCAM case study). Another



example is PQA who are making inroads with Venture Capital networks in the UK and US and the deep-tech sector to encourage investment into photonics.

Collaboration Fund

Round 1 PBIAAs also reported varying levels of progress in the delivery of their Collaboration Fund. A few interviewees noted that setting up the Collaboration Fund has required more groundwork and lead in time, compared to the calls for proposals within their consortia. A few interviewees (eg, Yorkshire MedTech, LINCAM) said that their PBIAAs decided to fold the Collaboration Fund into their own consortia calls for proposals, with reviewers blind to which universities proposals came from. As discussed in section 4.3.2.3, the quality of proposals received for the Collaboration Fund has been mixed, with some proposals lacking understanding of industry need, commercialisation or how their project will bring economic or social benefit to the geographic area/ cluster. Some interviewees are considering more targeted support to applicants to the collaboration fund to improve the quality of applications. A few interviewees noted the potential for marketing their collaboration fund to other PBIAAs where there is cross-over in scope.

Emerging lesson learned: When calling for proposals from non-consortia universities, it is important to offer support to applicants to ensure that their proposals have sufficient appreciation of place.

5.2.2 Knowledge and understanding of consortium and R&D

Key findings: Multiple Round 1 PBIAA interviews have started delivering activities aimed at improving knowledge and understanding of their consortium and R&D, with some early indications of outcomes in this area.

Table 5 – R&D technical knowledge, baseline survey

Please rate your R&D technical knowledge and expertise related to your thematic area	(n=93)
Response	Responses
I am unable to answer technical questions about my thematic area and always need to consult technical experts in my consortium	3%
I am unable to answer most technical questions about my thematic area and frequently need to consult with others in the consortium	3%
I can answer some technical questions about my thematic area but sometimes need to consult with others in the consortium	29%
I can answer most technical questions about my thematic area	42%
I can answer all technical questions about my thematic area	15%
N/A	8%
Please rate the R&D technical knowledge and expertise within your consortium. (n=93)	
Response	Responses
I am unable to source technical information on my project area from within my consortium	0%
I am seldom able to source technical information on my project area from within my consortium	0%
I am sometimes able to source technical information on my project area from within my consortium	9%
I am mostly able to source technical information on my project area from within my consortium	26%
I am always able to source technical information on my project area from within my consortium	47%
N/A	16%

As shown by Table 5, 57% of respondents felt that they could answer all or most technical questions on their thematic area, and 75% of respondents felt they could always or mostly source technical information from within their consortium. This suggests that whilst respondents weren't as confident with their own knowledge and expertise (as expected given not all consortia members are from an EPS background), they felt more confident in their ability to find someone with the required knowledge and expertise within their consortium.

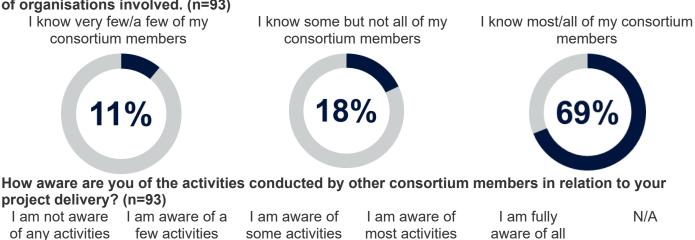


Nevertheless, multiple interviewees said that they are looking to further develop R&D knowledge and expertise in their consortium. So far, interviewees have said that this primarily relates to improving knowledge around commercialisation for early-stage academics. Consequently, multiple PBIAAs have delivered training sessions on this topic. Whilst interviewees said there is still scope to develop commercialisation skills in early-stage academics, they felt that progress has been made, evidenced by better understanding of commercialisation in proposals received.

PBIAAs have also looked to build specific R&D skills that were highlighted as gaps through scoping exercises. Whilst commercialisation was a common skill gap across multiple PBIAAs, interviewees also highlighted skills gaps that relate to their specific discipline, which they have looked to address through training. For example, one PBIAA highlighted a skills gap relating to engineers understanding of PPIE, so have delivered training and offered ongoing support to academics to help them with incorporating PPIE into their proposals. Interviewees from this PBIAA noted that they have started to see an improved understanding of this area. Other examples include Yorkshire MedTech and DHTA providing training on commercialisation and regulatory pathways.

Figure 3 – Knowledge and understanding of the consortia, baseline survey







As shown by Figure 3, 69% of respondents knew all or most of their consortia members, and 53% of respondents were aware of all or most of the activities caried out by their consortia members. This suggests that this is an area where there is scope for development through the PBIAA scheme. Interviewees said they are trying to build understanding of their consortia and activities through regular events, webinars and workshops. Interviewees said that these have been successful in improving understanding of what each consortia member is researching, as each event/webinar focuses on a specific research portfolio.

"[We are building] a real understanding of each other's activities in a lot more detail than previously" – Consortia member

"Previously we'd got an agreement where each university would focus on particular subtopics and that has become much better defined and understood" – Consortia member



A few interviewees said that through these regular events, workshops and webinars, they have started to form new partnerships. For example, one PBIAA explained how a 'relationship builder' grant funded workshops, which were well attended by industry, and subsequently led to further partnership and successful proposals (for further details, see IBIC case study).

A few interviewees noted that whilst building R&D technical knowledge and consortium awareness is one of their key objectives, they are unsure of how to evidence this and demonstrate progress through Key Performance Indicators (KPIs). Therefore, they are uncertain about the extent of progress made in these outcome areas.

5.2.3 Knowledge and understanding of place

Key findings: Through workshops and scoping activities, consortia have started to develop their understanding of place, and tailor their future activities to better meet the needs of their place.

Interviewees gave multiple examples of training delivered to help academics improve their understanding of place. Training sessions were co-designed and delivered by academics and industry stakeholders to explore with early-stage academics what issues industry are experiencing, linked to the geographic area they operate in. Whilst interviewees said there is still scope to improve academics understanding of place, interviewees felt that there has been an improvement, evidenced by proposals that better account for place-based challenges, and how to deliver social and economic benefits to a place.

Several interviewees noted that their PBIAAs have conducted scoping activities, such as workshops, to identify local challenges that could be addressed through PBIAA initiatives. These activities have helped consortia gain a deeper understanding of their local context. As a result, PBIAAs have begun designing activities that are better tailored to the specific needs of their areas. For instance, PQA shared that their scoping work revealed a shortage of technician-level skills in their region, prompting the development of a programme to support skill-building at that level.

5.2.4 Integration into wider R&I landscape

Key findings: PBIAAs have started integrating businesses who previously had not engaged with academics into the R&I landscape through technical projects and training. Additionally, PBIAAs have started to both align themselves and influence their regional R&I policy environment.

Whilst still early into the delivery of the PBIAAs, there are some emerging outcomes surrounding integration into the wider R&I landscape. Firstly, PBIAAs have sought to better integrate industry into the wider R&I landscape. PBIAAs have sought to do this by:

- Developing the skills and facilitating the access to cutting edge facilities for businesses already in a relevant EPS space; and
- Helping to facilitate businesses to pivot into their EPS space.

To enable this, PBIAAs engaged industry stakeholders throughout the design and early implementation. This has included through stakeholder consultations, workshops, conferences, targeted business development and networking. This has helped to engage businesses that have previously not engaged with R&I or academics. For example, the Park Royal Net-Zero Food Supply Chains PBIAA has engaged with multiple businesses who have not engaged with academia before to deliver a set of projects designed to address their businesses challenges (see Park Royal PBIAA case study). Another example from South Wales Compound Semiconductor is a website they are developing to better explain what the entities in Cardiff University and Swansea University can do for external partners. Additionally, PBIAAs have allocated funding to multiple projects that are collaborations between academia and industry, which helps to further integrate industry into the R&I landscape.



"When we assess the applications, one important criterion [we prioritise] is co-creation activity, whether the industry partner contributes enough into shaping the technology and/or translating the technology into practical applications" – Consortia member

Academic consortia members interviewed said that their engagement with industry has helped increase their knowledge of industry needs, and how industry can be effectively integrated into the R&I landscape. Using this knowledge, multiple PBIAAs have planned and/or delivered training aimed at facilitating businesses' entry into the R&I landscape by increasing their capability to use cutting edge tools and research infrastructure. One example of this is training delivered by the SWCS PBIAA to businesses in the compound semiconductor cluster, which gave them access to local research infrastructure (Cardiff University's Queen's Cleanroom) to develop their knowledge, understanding and skills relating to compound semiconductors and working safely in cleanrooms (see SWCS PBIAA case study).

PBIAAs have also sought to align their activities with the wider R&I landscape. This has included aligning the strategic priorities of PBIAAs with regional growth plans to focus and accelerate cluster growth. In some cases where recent civic restructuring has taken place, consortia members interviewed said they have looked to influence civic society to include their EPS area as a strategic priority for the region.

"Our mayoral authority have [our EPS area] as a strategic priority, but do they understand what they need to do? How do they get that inward investment?... [We] have a lot of expertise in this area, so we can work with policymakers to see what they need to do to get the innovation they need" — Consortia member

"We are collating views of industry partners across the region, channelling [those views] into policy documents and then using that to influence government." – Project Lead

5.3. Non-consortia and places

Key findings: Non-consortia outcomes tend to be longer-term outcomes, which are difficult to observe through this early-stage review.

As set out in the ToC, PBIAAs aim to achieve outcomes that impact other stakeholders outside of their consortia (non-consortia outcomes). This includes for local businesses (e.g. increasing collaboration and knowledge exchange) and communities (e.g. developing skills and creating jobs). Interviewees said that there have been few non-consortia outcomes to date, and that they expect these types of outcomes to be experienced in the longer-term. One of these has been skills development. A few interviewees said that they have started to deliver training sessions to industry staff on how to use cutting edge technology, improving the skills of their local workforce (see section 5.2.4).

A key objective cited by multiple interviewees was to grow the profile of their cluster both nationally and internationally. Interviewees said that they have started to take steps to achieve this through various networking events PBIAAs have held and attended. For example, consortia members from the LinCam AgTech PBIAA were invited to the British Embassy in the US to input into the UK-US AgTech policy. Interviewees also highlighted that they have had early discussions to encourage Foreign Direct Investment (FDI) into their region. Interviewees highlighted that civic partners are well positioned to facilitate FDI as they can discuss how the PBIAA, as well as other regional policies facilitate an environment that is conducive to business growth.

5.4. Sustainability

Key findings: Interviewees said that through the PBIAA scheme they have started to deliver capability and relationship building activities to ensure the growth and sustainability of their clusters.

In the early stages of the PBIAA scheme, consortia members have started to think about and deliver activities which will promote the long-term sustainability with the cluster. In terms of sustainability, interviewees from emerging clusters said that they aim to develop their cluster into an established cluster, whereas interviewees from established clusters aim to grow their cluster so that it becomes internationally recognised. Capability building through training provided to industry and early career researchers (see



section 5.2.1) and relationship building (see sections 4.3.2.2 and 5.2.1) were cited as key activities that will ensure the sustainability of the PBIAA clusters.

5.5. Summary

Despite the early stage of delivery, there is emerging evidence that PBIAAs are making progress across various areas of work. However, most PBIAAs have either just started activities or have activities planned for later in the year and are likely to observe the outcomes further down the line.



Capacity building and PBIAA activities:

- PBIAAs have conducted a wide range of capacity-building activities, including mentoring, workshops, and training. These efforts are helping academics, particularly early-career researchers, develop skills in commercialisation and industry engagement.
- PBIAAs have held consultations with industry stakeholders to highlight skill gaps within the cluster workforce, which PBIAAs can develop training to help address. Industry skill gaps identified so far by PBIAAs have included technician level skills, and skills relating to net zero practice. Some PBIAAs have started delivering this training to industry, which has been positively received.
- PBIAAs have developed secondment schemes between academia and industry. Some suggested this required a longer lead time than expected due to the need for relationship building and planning with industry stakeholders.
- PBIAAs also conducted training for industry staff to increase their awareness of key innovations and new research from academia. This also required a longer-than-expected lead time due to bureaucracy and time taken to gain the relevant approvals from companies.
- Lesson learned: activities involving significant industry collaboration require more time and groundwork to implement effectively.

Awareness and networking:

- Workshops have proven effective in raising awareness and fostering new partnerships, especially when targeted at specific segments of the value chain. Civic partners have played a vital role in promoting PBIAAs through their existing networks and events.
- PBIAAs used a targeted marketing approach and business support networks to successfully engage industry and develop new partnerships.
- **Lesson learned:** Civic bodies are uniquely positioned to amplify awareness and engagement within and beyond the cluster.



Policy and public engagement:

- Some PBIAAs have begun engaging with policymakers and drafting policy papers, aided by strong civic and academic networks.
- While it is too early to observe policy impact, early engagement is laying the groundwork for future influence.
- Some PBIAAs are also engaging the general public and have KPIs around increasing the diversity of stakeholders engaged in science and technology.
- Lesson learned: Early policy engagement benefits from leveraging existing relationships and civic partner networks.



Collaboration Fund:

- Progress on the Collaboration Fund has been mixed. Some consortia have integrated it into their internal calls, while others faced challenges with proposal quality from non-consortia universities.
- **Lesson learned**: Non-consortia applicants need targeted support to align proposals with place-based goals and commercial relevance.

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Knowledge and understanding of consortium and R&D:

- Survey data and interviews show that while individual technical confidence varies, most respondents feel they can access the expertise they need within their consortium.
- Training has improved understanding of commercialisation and place-based challenges for consortium members, and regular events have enhanced awareness of consortium activities.
- **Lesson learned**: Ongoing training and structured engagement are key to building both technical and contextual understanding within consortia.



Understanding of place:

- Workshops and scoping exercises have deepened consortia's understanding of local challenges, leading to tailored responses such as technician training programs. This place-sensitive approach is beginning to shape more relevant and impactful activities.
- **Lesson learned:** Co-designed training and scoping activities are effective tools for embedding place-based thinking into PBIAA design and delivery.



Wider R&I landscape & non-consortia outcomes:

- While broader integration into the R&D landscape outcomes are still emerging, early indicators include:
 - Upskilling of local industry staff and;
 - o Helping to facilitate businesses to pivot into the consortium's EPS space
- PBIAAs are working to align their activities with the wider R&I landscape, including with regional growth plans and influencing local authorities to prioritise their EPS area in new plans.
- **Lesson learned**: Building cluster identity and visibility is a foundational step toward long-term integration and attracting investment.



Sustainability:

- PBIAAs are starting to deliver capability and relationship-building activities to ensure sustainability
 of their clusters.
- For emerging clusters, this means developing their cluster into an established one.
- For established clusters, this means becoming internationally recognised.
- **Lesson learned**: Building cluster identity and visibility is a foundational step toward long-term integration and attracting investment.



6. Conclusions and recommendations

6.1. Conclusions

Partnerships

The PBIAA scheme has effectively enabled broad-based partnerships spanning academia, industry, and civic organisations. Established clusters capitalised on existing networks to rapidly form consortia and initiate project delivery. In contrast, emerging clusters faced early challenges in partnership development but benefited from the programme's adaptable design and EPSRC support at the application stage, which helped refine their objectives and funding approach. Civic engagement was strengthened through collaboration with local authorities, business alliances, and regional development bodies—aligning PBIAA goals with broader economic strategies and enhancing stakeholder participation.

Effectiveness

The place-based strategy has successfully encouraged consortia to tackle regional priorities and foster collaborative delivery. Several PBIAAs reported early wins through stakeholder engagement, targeted calls for proposals, and capacity-building activities. The flexible PBIAA model allowed clusters to tailor their initiatives to local contexts, boosting relevance and impact. There are signs of growing engagement from civic and industrial stakeholders, as well as increased visibility of academic expertise within consortia. Academics are demonstrating stronger awareness of place-specific challenges, with ongoing evaluations set to explore variation across PBIAA implementations.

Adoption

PBIAAs supported a wide spectrum of technical initiatives and inclusive stakeholder engagement. Consortia employed launch events, workshops, and webinars to spark interest and nurture new partnerships. Early-career researchers gained exposure by presenting work and building connections with civic and industry actors. Civic and industrial partners, in turn, focused on commercial potential—with some PBIAAs spotlighting their clusters internationally to attract investment. There's early evidence of more inclusive practices, including public-facing initiatives such as citizen assemblies and community outreach embedded into programme strategies.

Implementation

The PBIAA model promoted integrated collaboration across academic, civic, and industry partners. Governance structures—like advisory boards—were introduced to align activities with regional priorities and ensure cross-sector representation. Key enablers included flexible funding arrangements and the appointment of dedicated coordination staff. Challenges arose from internal institutional processes, resource constraints, and differing sectoral norms—especially around issues like IP. Nonetheless, strong leadership and adaptive coordination helped navigate these tensions. Early-round applicants exhibited initiative in stakeholder engagement and calls for proposals, some modifying funding structures and offering bespoke support based on emerging needs. There is growing focus on commercialisation and local impact, with mentoring and training provided to elevate proposal quality.

Maintenance

Long-term sustainability and durable partnerships are core objectives of the PBIAAs. Although too early for definitive assessments, initial efforts suggest foundations for future resilience are being laid. These include strategic engagement, skills development, and links with other funders to establish ongoing financial support. Consortia are exploring avenues for spin-outs, licensing, and investment, while starting to monitor outcomes related to economic growth and workforce development. Staffing continuity and administrative limitations remain areas of concern, reinforcing the importance of stable project support and robust management frameworks.



6.2. Recommendations

The following recommendations are split by those relevant to the delivery of existing PBIAAs and for future rounds of PBIAA or wider investments by EPSRC.

For PBIAAs

- 1. Enhance academic understanding of place-based context in calls for proposals. Academics especially those that are not used to bringing local context into their research can find it challenging to embed place within their proposals. PBIAAs should accompany calls for proposals with targeted support such as training, mentoring, and tailored guidance to help researchers strengthen their understanding of local priorities and shape more impactful submissions.
- 2. Establish dedicated project management capacity. Due to the scale and complexity of PBIAAs, consortia should allocate resources to secure at least one full-time equivalent (FTE) project manager, ideally supported by a broader team. Separating core coordination and administration functions from business development responsibilities will enable PBIAAs to effectively manage internal operations while actively cultivating new partnerships and outreach opportunities.

For EPSRC

- 3. Provide additional support for emerging clusters. Emerging consortia often face greater time and resource burdens in building networks and launching activities especially across wide geographic areas. EPSRC should consider equalising project management budgets between emerging and established clusters. It should also consider allowing for greater flexibility around project start timelines and incorporate this into KPI measures and guidance.
- 4. Advise applicants on the benefits of having strong industry links within their consortia leadership. Prior experience of industry engagement accelerates cluster mobilisation and enhances potential for spinouts and commercialisation. For future rounds of PBIAA (if applicable), EPSRC should advise applicants on the benefit of having consortia leadership with demonstrable track record of collaborative work.
- 5. Ensure that high levels of civic engagement are maintained across the PBIAA portfolio and for the full duration of awards. Civic actors play a critical role in cluster success by facilitating access to local business networks, supporting inward investment, and unlocking operational barriers such as planning permission and strategic priorities. Continued alignment with regional R&I strategies and active civic involvement will be essential for the long-term sustainability of PBIAAs or recipients of future EPSRC / UKRI funding awards.
- 6. Strengthen knowledge exchange between PBIAAs. Peer learning has proven highly valuable, as demonstrated by the success of the Edinburgh workshop. EPSRC should facilitate regular (once or twice per year as a minimum) knowledge-sharing sessions across PBIAAs ensuring that both early and more advanced consortia are represented. These forums will foster thematic collaboration and promote good practice in governance and delivery.
- 7. Offer clearer guidance on administration, subsidy control, and IP management. While initial industry engagement has been promising, PBIAAs continue to encounter common challenges in establishing new partnerships especially in emerging clusters. EPSRC should develop practical guidance on strategies project leads or any academic seeking to engage industry could use based on its experience with IAAs and other initiatives to address common barriers and enable smoother collaboration.

Due to the early-stage nature of this review we are unable to report conclusively on the overall impact of the PBIAA programme at this stage. Even though there is significant emerging evidence of outcomes being achieved, there are still key gaps that need to be addressed via future evaluations / reviews once PBIAAs



have had more time to deliver and reflect on their projects. To this end, we have developed a recommended M&E Framework which captures key outcome areas and data sources for measurement, which EPSRC can use as a basis for future impact evaluation planning. In addition to the outcomes covered in the ToC, our evidence gathering at this early stage has provided the basis for a suggested group of (sample) research questions that any future evaluation of the PBIAA programme should consider:

Suggested research questions for future evaluation of the PBIAA scheme:

- a) How can future evaluation methods incorporate assessments of Value for Money (VfM)?
- b) What is the impact of different project management models on cost-efficiency and delivery effectiveness?
- c) Through what mechanisms do PBIAAs contribute to the long-term sustainability of sectoral clusters?
- d) How are PBIAAs aligning with civic partner priorities and regional strategic plans?
- e) What early signals indicate the potential for PBIAAs to leave a lasting regional legacy?
- f) Which types of civic partners are most effective in supporting PBIAA goals, and why?
- g) In what ways do civic actors shape the visibility, strategy, and policy engagement of PBIAAs?
- h) What types of industry partners (e.g. SMEs vs. large firms) are most successfully engaged, and what factors enable or hinder this?
- i) What tangible contributions—financial, in-kind, or strategic—are industry partners making, and how do these differ by sector or region?
- j) What factors drive effective internal collaboration within consortia, including governance and team structure?
- k) How do advisory board configurations and subcommittees influence decision-making and project delivery?
- I) What alternative funding sources have higher education institutions accessed alongside PBIAA investment?
- m) What, if any, outcomes have emerged from consortia whose applications were unsuccessful?
- n) To what extent did PBIAAs grow the profile of their cluster, both nationally and internationally? To what extent did this vary across emerging and established clusters?



7. Appendices

7.1. Detailed methodology

7.1.1 Overview

Place based initiatives such as the PBIAA scheme need a more complex evaluation approach than that required by other programmes that do not have this dimension. To deliver an evaluation that a) recognises the starting point for each area involved; b) builds in open exchanges and joint learning with key stakeholders at each stage and c) identifies not only the outcomes/ early impacts being achieved, but the causal pathways that underpin these, we used a Realist Theory Based Evaluation approach, underpinned by Developmental Evaluation (DE) principles.

Our Realist approach acknowledged that the same intervention will not work everywhere, so instead focuses on "what works, for whom, under what circumstances and how." This is critical for place-based approaches such as the PBIAA scheme which is designed to build on local needs and contexts, and may produce mixed outcomes depending on existing infrastructure, partner relationships and networks. A DE approach allowed for timely and open exchange between evaluators and those involved in programme design and implementation to generate early and continuous dialogue. PBIAAs were brought into the data collection requirements, providing ESPRC with evaluation findings that have greater utility and resonance.

7.1.1.1 Research questions

Table 6 presents the research questions for the PBIAA scheme review.

Table 6: Research questions

RE-AIM	Definition	Example questions
dimension	Deminion	Example questions
Reach	Number and representativeness of individuals participating	 What types of organisations did the selected (and non-selected) PBIAA partnerships consist of and how many were proximate to the target place? Did the individually funded PBIAA reach the type of partnerships it set out to? To what extent did individually funded PBIAAs develop existing or new partnerships (including funding made available to non-consortium members)?
Effectiveness	Impact on outcomes, including unintended and negative and economic outcomes	 What were the enhanced benefits, as compared to a non-place-based approaches and were these generated? How did PBIAAs self-select their status as an emerging or established cluster? How effective was this? What are the observed changes/outcomes and for whom, including proximal short-term effects e.g. capacity? To what extent is the PBIAA scheme addressing place-based needs, challenges and context to deliver? How and to what extent did outcomes vary across individually funded PBIAAs. To what extent can variation be explained by place-based factors? Is there an increased recognition of the cluster/place specialism, leading to increased capability and capacity?



Adoption	Number and representativeness of settings and individuals initiating the intervention	What types of PBIAAs were supported, including settings (place, organisations) and individuals involved in delivery?
Implementation	Delivery as intended, adaptation, costs of delivery	 How do features of the PBIAA scheme compare to other models and how does this relate to observed outcomes and effects? How have individually funded PBIAAs differentiated from previous ways of working locally and what was already there in the areas? How have individually funded PBIAAs developed or strengthened collaboration with different stakeholders and what benefits has this provided for future research activity? What range of implementation strategies were used by individually funded PBIAAs, and which were most successful and why?
Maintenance	Sustainment and institutionalisation of implementation, sustainment of impacts	 To what extent have partnerships developed and look to continue? To what extent has the PBIAA scheme strengthened the sustainability of sectoral clusters and how?

7.1.2 Impact evaluation survey

To address data gaps for outputs and outcomes identified in the M&E framework, we designed a baseline survey tool for administration to the range of partners across all individually funded PBIAAs. We used routing to reduce the length and minimise the risk of low engagement from individually funded PBIAAs.

7.1.2.1 Collecting the survey

Round 1 PBIAA contacts were given up to three reminders to complete the survey from March 2025-May 2025. Round 2 PBIAA contacts were given up to three reminders to complete the survey from March 2025-June 2025. Round 2 PBIAAs were given a longer timeframe due to some early feedback from Round 2 consortia members who felt they were unable to complete the survey until their PBIAA launched.

7.1.2.2 Data analysis

Due to the response rate, we have not carried out subgroup analysis on quantitative data.

7.1.3 Interviews

We conducted 35 in-depth interviews March – July 2025, focused on process, implementation and emerging outcomes to support EPSRC learnings on fund management and embedding place-based approaches in future funds.

7.1.3.1 Topics covered in interviews

The interviews explored how partnerships were established for each PBIAA, including how the consortium approach was developed and the specific roles of each partner in both the design and delivery of the PBIAA. Interviews also covered early or emerging outcomes from delivery, highlighting what has worked well, what has been more challenging, and key lessons learned from your place-based partnership so far. In addition, some interviewees discussed emerging success stories to contribute to case studies.



7.1.3.2 Sampling

Initially, all Project Leads were invited to take part in an interview. At the end of the interviews, we asked Project Leads to suggest others within their consortia that we should reach out to for interview. Invitations to interviews were later extended to co-investigators named in the PBIAA applications.

7.1.3.3 Analysis

Analysis of data from interviews and focus groups was conducted both inductively and deductively. The initial analytical framework was agreed with EPSRC as part of the M&E framework. This was based on the COM-B—led Theory of Change and priority research questions, which guided the initial coding of interviews and was further iterated to capture unanticipated outcomes or themes. We analysed findings at the level of individual partnerships (within) to understand which features contributed to success. We also analysed data across emerging and established clusters, sectors, places, and types of organisations (between) to identify commonalities and aspects that particularly benefited different types of places, clusters, or sectors.

7.1.4 Limitations

Respondent profile: Round 1 PBIAAs were overrepresented within the PBIAAs interviewed and the survey responses received. As data collection started before the launch of Round 2 PBIAAs, there was some hesitation from Round 2 PBIAAs to participate in data collection. Consequently, findings from Round 1 PBIAAs have a slightly higher representation than findings from Round 2 PBIAAs.

Timeframe: Round 1 PBIAAs started delivery 12-months prior to the data collection conducted in this review, so were only able to evidence short-term outcomes. Data collection with Round 2 PBIAAs was conducted before their PBIAAs launched, and up to three months post-launch, therefore it was too early to evidence outcomes.

7.2. Theory of Change

Figure 4 presents the PBIAA scheme ToC.

Figure 4: PBIAA scheme ToC



7.3. Data tables

7.3.1.1 Respondent profile

Role in the PBIAA		%
Principal Investigator / Project Lead	9	11%
Advisory Board Member	4	4%
Civic Partner	5	5%
Co-investigator	44	47%
Collaborator/Project Partner	25	27%
Project Team Member	5	5%
Other	1	1%



Consortium categorisation as 'established' or 'emerging' at the time of application for the PBIAA	Count	%
Established	34	37%
Emerging	38	41%
Don't know	21	23%
Total	93	100%

Type of organisation	Count	%
Higher Education Institution	60	65%
Civic, local gov or NHS	7	8%
Private sector, not SME	2	2%
SMEs	10	11%
Research organisation	3	3%
Other	11	12%
Total	93	100%

Funding round	Count	%
Round 1	53	57%
Round 2	35	38%
Don't know	5	5%
Total	93	100%

7.3.1.2 Application questions (Project Leads)

Time taken to complete the application compared to other similar applications		%
1 = Much lower than expected	0	0%
2 = Lower than expected	0	0%
3 = Met expectations	5	56%



4 = Higher than expected	4	44%
5 = much higher than expected	0	0%
Total	9	100%

Speed of response from EPSRC to requests for information on the application		%
1 = Much lower than expected	1	11%
2 = Lower than expected	2	22%
3 = Met expectations	4	44%
4 = Higher than expected	1	11%
5 = much higher than expected	1	11%
Total	9	100%

Volume of communications from EPSRC	Count	%
1 = Much lower than expected	0	0%
2 = Lower than expected	2	22%
3 = Met expectations	6	67%
4 = Higher than expected	1	11%
5 = much higher than expected	0	0%
Total	9	100%

7.3.1.3 Process

How often do you meet as a consortium?	Count	%
More than once a week	0	0%
Once a week	7	8%
Once every 2 weeks	9	10%
Once a month	32	34%
Once every 2-3 months	20	22%
Less than once every 2-3 months	8	9%



Other	5	5%
Doesn't/not yet met	12	13%
Total	93	100%

How would you rate the frequency of meetings?	Count	%
Too infrequently	10	11%
About the right level of frequency	79	89%
Too frequently	0	0%
Total	89	100%

To what extent do you feel able to meaningfully contribute to discussions and influence key decisions about your PBIAA?	Count	%
Not at all influential	3	3%
Slightly influential	8	9%
Somewhat influential	28	30%
Very influential	37	40%
Extremely influential	10	11%
N/A	7	8%
Total	93	100%

Has your consortium formalised any new partnerships as a result of the PBIAA funding over the past 12 months? A new partnership could be with any organisation, private or public.	Count	%
Yes	29	31%
No	21	23%
Don't know	43	46%
Total	93	100%



7.3.1.4 Knowledge and understanding

Please rate your R&D technical knowledge and expertise related to your thematic area.	Count	%
I am unable to answer technical questions about my thematic area and always need to consult technical experts in my consortium	3	3%
I am unable to answer most technical questions about my thematic area and frequently need to consult with others in the consortium	3	3%
I can answer some technical questions about my thematic area but sometimes need to consult with others in the consortium	27	29%
I can answer most technical questions about my thematic area	39	42%
I can answer all technical questions about my thematic area	14	15%
N/A	7	8%
Total	93	100%

Please indicate your understanding of how to utilise the cutting edge of research related to your thematic area.	Count	%
I am unable to envision how to practically apply / utilise technical aspects of my thematic area	2	2%
I am less confident in being able to practically apply / utilise technical aspects of my thematic area	4	4%
I am somewhat confident in being able to practically apply / utilise technical aspects of my thematic area	19	20%
I am mostly confident in being able to practically apply / utilise technical aspects of my thematic area	27	29%
I am highly confident in being able to practically apply / utilise technical aspects of my thematic area	34	37%
N/A	7	8%
Total	93	100%

Please rate the R&D technical knowledge and expertise within your consortium.	Count	%
I am unable to source technical information on my project area from within my consortium	0	0%



I am seldom able to source technical information on my project area from within my consortium	0	0%
I am sometimes able to source technical information on my project area from within my consortium	8	9%
I am mostly able to source technical information on my project area from within my consortium	26	28%
I am always able to source technical information on my project area from within my consortium	44	47%
N/A	15	16%
Total	93	100%

Please rate the knowledge of local research infrastructure in your consortium. Local research infrastructure includes, but is not limited to, university departments, public or private sector research facilities, research institutes and catapult centres.	Count	%
Low knowledge and awareness of local research infrastructure	0	0%
Less knowledge and awareness of local research infrastructure	0	0%
Some knowledge and awareness of local research infrastructure	7	8%
Moderate knowledge and awareness of local research infrastructure	24	26%
Strong knowledge and awareness of local research infrastructure	56	60%
Don't know	6	6%
Total	93	100%

Please rate the knowledge level of the following aspect within your consortium:

Local industrial strategies that affect my consortium.	Count	%
Low knowledge and awareness	0	0%
Less knowledge and awareness	3	3%
Some knowledge and awareness	8	9%
Moderate knowledge and awareness	28	30%
Strong knowledge and awareness	47	51%
Don't know	7	8%



Please rate the knowledge level of the following aspect within your consortium:

Local research, innovation and productivity challenges that affect my consortium.	Count	%
Low knowledge and awareness	0	0%
Less knowledge and awareness	2	2%
Some knowledge and awareness	7	8%
Moderate knowledge and awareness	26	28%
Strong knowledge and awareness	49	53%
Don't know	9	10%
Total	93	100%

7.3.1.5 Cluster and consortium

Please indicate your knowledge regarding the composition of your consortium, including the types of organisations involved.	Count	%
I know very few consortium members	1	1%
I know of a few consortium members	9	10%
I know some but not all consortium members	17	18%
I know of most of my consortium members	33	35%
I know all my consortium members	31	33%
N/A	2	2%
Total	93	100%

How aware are you of the activities conducted by other consortium members in relation to your project delivery?	Count	%
I am not aware of any activities	5	5%
I am aware of a few activities	4	4%
I am aware of some activities	32	34%
I am aware of most activities	32	34%



I am fully aware of all activities	16	17%
N/A	4	4%
Total	93	100%

'My consortium has access to a strong problem-solving network that can address local challenges.'	Count	%
Strongly disagree	4	4%
Disagree	0	0%
Neither agree nor disagree	10	11%
Agree	42	45%
Strongly agree	37	40%
N/A	0	0%
Total	93	100%

Please indicate the level of collaboration of organisations within your cluster to deliver your project.	Count	%
Little or no collaboration (only one organisation is delivering the project)	0	0%
A small amount of collaboration (a few organisations are working together to deliver the project)	0	0%
Some collaboration (some consortium members are working together to deliver the project)	20	22%
High collaboration (most consortium members are working together to deliver the project)	41	44%
Very high collaboration (all consortium members are working together to deliver the project)	24	26%
N/A	8	9%
Total	93	100%

Have you or others in your consortium collaborated in knowledge sharing activities with other consortia?	Count	%
Yes	38	41%



No	8	9%
Don't know	47	51%
Total	93	100%

'I am satisfied with the quality of strategic leadership of my consortium'	Count	%
Strongly disagree	2	2%
Disagree	1	1%
Neither agree nor disagree	15	18%
Agree	26	31%
Strongly agree	39	47%
Total	83	100%

'I am satisfied with the quality of operational leadership of my consortium'	Count	%
Strongly disagree	2	2%
Disagree	1	1%
Neither agree nor disagree	17	21%
Agree	26	32%
Strongly agree	36	44%
Total	82	100%

To what extent do you feel there is a R&D skills shortage within your cluster?	Count	%
Always able to fill vacancies (no skills shortage)	4	4%
Usually fill vacancies	23	25%
Sometimes unable to fill vacancies	30	32%
Usually unable to fill vacancies	4	4%
Unable to fill vacancies (high R&D skills shortage)	2	2%
Don't know	30	32%
Total	93	100%



How frequently does your consortium engage entities within your cluster?	Count	%
Weekly	9	10%
Monthly	24	26%
Quarterly	16	17%
6-monthly	7	8%
Annually	2	2%
N/A	35	38%
Total	93	100%

How often does your consortium engage the public / civil society to inform project activities?	Count	%
Never	0	0%
Almost never	2	2%
Sometimes	26	28%
Almost always	21	23%
Always	13	14%
N/A	31	33%
Total	93	100%

7.3.1.6 Behaviours

Please indicate how often you engage in the following activities with your place-based consortium.

Utilising local research infrastructure.	Count	%
Weekly	19	21%
Monthly	20	22%
Quarterly	13	14%
6-monthly	4	4%
Annually	1	1%
N/A	34	37%



Utilising local supply chains.	Count	%
Weekly	6	7%
Monthly	20	22%
Quarterly	13	14%
6-monthly	5	6%
Annually	3	3%
N/A	43	48%
Total	90	100%

Advocating for the growth of my place/consortium.	Count	%
Weekly	22	24%
Monthly	26	29%
Quarterly	8	9%
6-monthly	3	3%
Annually	2	2%
N/A	30	33%
Total	91	100%

Sharing knowledge with other PBIAA consortia across the UK.	Count	%
Weekly	0	0%
Monthly	10	11%
Quarterly	13	14%
6-monthly	11	12%
Annually	13	14%
N/A	43	48%
Total	90	100%



7.4. Survey questionnaire

About you
1. What is your role within your PBIAA consortium?
(Please select one of the following options)
□ Principal Investigator/Project Lead
□ Co-Investigator
☐ Civic lead
□ Collaborator/Project Partner
☐ Other: please specify
Free text response
2. Was your consortium categorised as 'established' or 'emerging' at the time of application for the PBIAA?
(Please select one of the following options)
□ Established
□ Emerging
□ Don't Know
3. What type of organisation do you work for?
(Please select one of the following options)
☐ Higher education institution (HEI)
□ Local government
☐ SMEs (companies with fewer than 250 staff and less than or equal to £44m in annual turnover or a balance sheet total of less than or equal to £38m)
□ Private sector business (not SMEs)
□ Self-employed
□ Research institute
□ Public sector research establishment
□ NHS bodies
☐ Independent research organisation
□ Catapult centre
☐ Civic body (Local Authorities, Advisory bodies, etc.)
□ Other: please specify
Free text response
4. What is your grant title?
(Please select one of the following options)



□F	☐ Funding round 1: Accelerating Impact of Community healthCarE in Tayside (AICCET)						
□F	unding round 1: A placed-based IAA i	n Photonic	Technologie	es in Scotland's	s Central Be	elt	
ΠF	Funding round 1: GW-SHIFT: Great Western Supercluster of Hydrogen Impact for Future Technologies						
□F	☐ Funding round 1: Industrial Biotechnology Innovation Cluster						
ΠF	I Funding round 1: Innovating Medical Technologies across the Yorkshire Region						
	Funding round 1: Northern Net Zero Accelerator - Energy Systems Integration for a Decarbonised Economy						
ΠF	I Funding round 1: Park Royal PBIAA Net-Zero Food Supply Chains						
□F	unding round 1: South Wales Compoเ	und Semico	nductor Pla	ce Based Impa	ct Accelera	tor	
ΠF	unding round 1: The LINCAM AgTech	Cluster					
□F	unding round 1: The SWITCH to Net 2	Zero Buildin	gs				
□F	unding round 2: Accelerating Innovati	on in the Fo	rth and Tay	Offshore Wind	d Cluster		
□F	unding round 2: CyberFocus - Cyber	Impact for tl	ne North We	est			
□F	unding round 2: Digital Healthcare Te	chnology In	npact Accel	erator (DHTA)			
□F	unding round 2: East Midlands Emerg	ing Rehabil	itation Tech	nology Growth	Enterprise		
□F	unding round 2: Maritime and Last Mi	le Net Zero	(MaLaMi)				
□F	unding round 2: North East Space Co	mmunicatio	ns Accelera	ator (NESCA)			
ПЕ	□ Funding round 2: Nuclear robotics and artificial intelligence cluster across Cumbria and Oxfordshire						
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[PI Res 5. P	on't know ONLY] Application process ponses for this section will be fully and lease share your experience of diffe	onymised. erent aspectons for each 1 = Much lower than	cts of the a ch stateme 2 = Lower than	pplication pro nt) 3 = Met	4 = Higher than	v. 5 = Much higher than	N/A
[PI Res 5. P (Ple	ONLY] Application process ponses for this section will be fully and lease share your experience of difference as select one of the following option. Time taken to complete the application compared to other	onymised. erent aspectons for each ons for each ons for each one of the content of the content on the content o	cts of the ach stateme 2 = Lower than expected	pplication pro nt) 3 = Met expectations	4 = Higher than expected	v. 5 = Much higher than expected	



6.	To what extent do	vou agree	or disagree	with the	following	statement:

"The level of information required for the application is commensurate with the amount of funding offered"?

(Please choose one of the following options)

1 = Strongly	2 = Disagree	3 = Neither agree	4 = Agree	5 = Strongly agree
disagree		nor disagree		

Process

☐ Other

The following questions are about how your consortium works together within the PBIAA scheme.

7. How often do you meet as a consortium?

(Please select from the following options)			
More than once a week			
☐ Once a week			
☐ Once every 2 weeks			
☐ Once a month			
☐ Once every 2-3 months			
☐ Less than once every 2-3 months			

1	Free text response
8.	. How would you rate the frequency of meetings? (Select one of the following options where 1 =

(Please choose one of the following options)

Too infrequently and 5 = Too frequently)

	2 = About the right	3 = Too frequently
infrequently	level of frequency	

9. To what extent do you feel able to meaningfully contribute to discussions and influence key decisions about your PBIAA? (Choose one of the following options where 1 = 'Very little' and 5 = 'To a great extent')

1 = Not at all 2 = Slightly influential	3 = Somewhat influential	4 = Very influential	5 = Extremely influential	N/A
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10. Has your consortium formalised any new partnerships as a result of the PBIAA funding over the past 12 months? A new partnership could be with any organisation, private or public.

Please select one	of the	following	options)
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(Please select one of the following options	3)
□ Yes	
□ No	
□ Don't know	



[SKIP NEXT QUESTION IF 'NO' OR 'DON'T KNOW' TO PREVIOUS QUESTION]

11. How many new partnerships has your consortium developed over the past 12 months? (Please enter your response in the field below)

Free text response

12. [ONLY FOR PI/PLs] How satisfied are you with the quality and frequency of communication with EPSRC?

(Please choose one of the following options where 1 = Not at all satisfied and 5 = Very satisfied)

1 = Not at all satisfied	2 = Slightly satisfied	3 = Moderately satisfied	4 = Very satisfied	5 = Extremely satisfied	N/A

[SKIP TO NEXT QUESTION IF 'N/A' SELECTED]

13. [PRINCIPAL INVESTIGATOR/PROJECT LEAD ONLY] Why did you give this score?

(Please enter your response in the field below)

Free text response

Your knowledge and understanding

The following questions are to help us understand the extent to which the PBIAA scheme encourages knowledge sharing and collaborative learning between consortium members and within the wider cluster. The questions are not intended to test respondents' levels of knowledge and are relevant to the wider PBIAA outcomes mentioned above. Please provide responses that most accurately reflect your current perceptions.

14. Please rate your R&D technical knowledge and expertise related to your thematic area.

(Please select one of the following options)

1 = I am unable to answer technical questions about my thematic area and always need to consult technical experts in my consortium	2 = I am unable to answer most technical questions about my thematic area and frequently need to consult with others in the consortium	I can answer some technical questions about my thematic area but sometimes need to consult with others in the consortium	4 = I can answer most technical questions about my thematic area	5 = I can answer all technical questions about my thematic area	N/A
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15. Please indicate your understanding of how to utilise the cutting edge of research related to your thematic area.

(Please select one of the following options)



envision how to practically apply / utilise technical aspects of my thematic area	2 = I am less confident in being able to practically apply / utilise technical aspects of my thematic area	3 = I am somewhat confident in being able to practically apply / utilise technical aspects of my thematic area	4 = I am mostly confident in being able to practically apply / utilise technical aspects of my thematic area	5 = I am highly confident in being able to practically apply / utilise technical aspects of my thematic area	N/A
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16. Please rate the R&D technical knowledge and expertise within your consortium.

(Please select one of the following options)

1 = I am unable to source technical information on my project area from within my consortium	2 = I am seldom able to source technical information on my project area from within my consortium	3 = I am sometimes able to source technical information on my project area from within my consortium	4 = I am mostly able to source technical information on my project area from within my consortium	5 = I am always able to source technical information on my project area from within my consortium	N/A
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17. Please rate the knowledge of local research infrastructure in your consortium. Local research infrastructure includes, but is not limited to, university departments, public or private sector research facilities, research institutes and catapult centres.

(Please select one of the following options)

1 = Low knowledge and awareness of local research infrastructure	2 = Less knowledge and awareness of local research infrastructure	3 = Some knowledge and awareness of local research infrastructure	4 = Moderate knowledge and awareness of local research infrastructure	5 = Strong knowledge and awareness of local research infrastructure	Don't know
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18. Please rate the knowledge level of the following aspects within your consortium.

(Please select one of the following options for each statement)

		1 = Low knowledge and awareness	2 = Less knowledge and awareness	3 = Some knowledge and awareness	4 = Moderate knowledge and awareness	5 = Strong knowledge and awareness	Don't know
a.	Local industrial strategies that affect my consortium.						



b.	Local research, innovation			
	and productivity challenges that affect my			
	consortium.			

Questions about working with my consortium

The following questions are about your consortium. Your 'consortium' refers to people or entities that have received funding from and are involved in delivering the PBIAA. They also include organisations that have received funding from EPSRC through the PBIAA. Only EPSRC will be able to see the data, responses will be analysed and shared in aggregate.

19. Please indicate your knowledge regarding the composition of your consortium, including the types of organisations involved.

(Please select one of the following options for each statement)

1 = I know very few consortium members 2 = I know of a few consortium members	3 = I know some but not all consortium members	4 = I know of most of my consortium members	5 = I know all my consortium members	N/A	
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20. How aware are you of the activities conducted by other consortium members in relation to your project delivery?

(Please select one of the following options for each statement)

20. [NOT FOR Principal Investigator / Project Lead] To what extent do you agree or disagree with the following statement:

'I am satisfied with the quality of strategic leadership of my consortium'

(Please select one of the following options)

1 = Strongly disagree	2 = Disagree	3 = Neither agree	4 = Agree	5 = Strongly agree	N/A	
	Disagree	nor disagree				

21. [NOT FOR Principal Investigator / Project Lead] To what extent do you agree or disagree with the following statement:

'I am satisfied with the quality of operational leadership of my consortium'

(Please select one of the following options)

1 = Strongly disagree	2 =	3 = Neither agree	4 = Agree	5 = Strongly agree	N/A	
	Disagree	nor disagree				

22. To what extent do you agree or disagree with the following statement:

'My consortium has access to a strong problem-solving network that can address local challenges.'



(Please select one of the following options)

1 = Strongly disagree 2 = Disagree	3 = Neither agree nor disagree	4 = Agree	5 = Strongly agree	N/A	
------------------------------------	--------------------------------	-----------	--------------------	-----	--

23. Please indicate the level of collaboration of organisations within your cluster to deliver your project.

(Please select one of the following options)

1 = Little or no collaboration (only one organisation is delivering the project)	2 = A small amount of collaboration (a few organisations are working together to deliver the project)	3 = Some collaboration (some consortium members are working together to deliver the project)	4 = High collaboration (most consortium members are working together to deliver the project)	5 = Very high collaboration (all consortium members are working together to deliver the project)	N/A
---	---	--	--	--	-----

24. Have you or others in your consortium collaborated in knowledge sharing activities with other consortia?

(consortia?
(Please select one of the following options)

	Vac	
ш	res	

No

☐ Don't Know

[SKIP TO NEXT QUESTION IF 'No' OR 'Don't Know']

25. Explain in a few sentences the nature of the collaboration

(Please input your answer into the space below)

Questions about working with my cluster

The following questions are about your cluster. 'Cluster' is defined as the thematic place-based group of entities whom you are looking to engage and impact through your project.

26. To what extent do you feel there is a R&D skills shortage within your cluster?

(Please choose one of the following options)

1 = Always able to fill vacancies (no skills shortage) 2 =	= Usually fill 3 = Sometime unable to fill vacancies	4 = Usually unable to fill vacancies	5 = Unable to fill vacancies (high R&D skills shortage)	Don't know
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27. How frequently does your consortium engage entities within your cluster?

(Please select one of the following options)



1 = Weekly 2 = N	onthly 3 = Quarterly	4 = 6- monthly	5 = Annually (Once)	N/A	
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28. How often does your consortium engage the public / civil society to inform project activities? (Please select one of the following options)

1 = Never	2 = Almost	3 = Sometimes	4 = Almost	5 = Always	N/A	
	never		always			

Behaviours

29. Please indicate how often you engage in the following activities with your place-based consortium.

Please select one of the following options for each statement

		1 = Weekly	2 = Monthly	3 = Quarterly	4 = 6- monthly	5 = Annually	N/A
a.	Utilising local research infrastructure.						
b.	Utilising local supply chains.						
C.	Advocating for the growth of my place/consortium.						
d.	Sharing knowledge with other PBIAA consortia across the UK.						

30. What is your email address?

(Please enter your response in the field below)

Closing window

Thank you for completing this survey. You may now close the window.

7.5. Monitoring and evaluation framework

The recommended M&E framework details the short-term outcomes, long-term outcomes and impacts from the ToC, along with possible indicators/metrics that could be used to evaluate the impact of the PBIAA scheme. This recommended M&E framework was used to inform the research tools of the early-stage review. It is also designed to guide data collection of future PBIAA scheme evaluation activity.

Each outcome/impact from the ToC is listed within the recommended M&E framework, with at least one potential indicator/metric which could be used to evaluate each outcome. Each potential indicator/metric details:



- Whether the potential indicator/metric would use a primary data source or a secondary data source;
- What data source would be used for the potential indicator/metric. To note, whilst some
 outcomes/impacts have multiple potential indicators/metrics, some of these may be better suited to
 measuring the outcome than others.
- Who would be responsible for collecting the data for the indicator/metric;
- The sample size of the indicator/metric;
- Whether the data was collected as part of the early-stage review, or will be collected in future monitoring and evaluation activity; and
- The availability of the data. This is RAG rated, where:
 - o Green The data is readily available through existing data collection channels.
 - Amber The data is not readily collected but there would be few barriers to starting data collection.
 - Red The data is not readily collected and there would be barriers to starting data collection,
 e.g. interviews with stakeholders, where contact details are unavailable.

The M&E framework is available separately as an excel file.

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RSM UK Consulting LLP

6th Floor, 25 Farringdon Street London EC4A 4AB United Kingdom T +44 20 3201 8000 rsmuk.com

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